



भारत का राजपत्र The Gazette of India

प्राधिकार से प्रकाशित
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NEW DELHI, SATURDAY, FEBRUARY 2, 1991 (MAGHA 13, 1912)

इस भाग में धिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके
[Separate paging is given to this Part in order that it may be filed as a separate compilation]

भाग III—खण्ड 2 [PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस
[Notifications and Notices Issued by the Patent Office relating to Patents and Designs]

THE PATENT OFFICE PATENTS AND DESIGNS

Calcutta, the 2nd February, 1991

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Telegraphic address "PATOFFICE".

Patent Office Branch,
Unit No. 401 to 405, III Floor,
Municipal Market Building,
Saraswati Marg, Karol Bagh,
New Delhi-110 005.

The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan and Uttar Pradesh and the Union Territories of Chandigarh and Delhi.

Telegraphic address "PATENTOFIC".

Patent Office Branch,
61, Wallajah Road,
Madras-600 002.

The States of Andhra Pradesh, Karnataka, Kerala, Tamilnadu, and the Union Territories of Pondicherry, Laccadive, Minicoy and Aminidivi Islands.

Telegraphic address "PATENTOFIS".

Patent Office (Head Office),
"NIZAM PALACE", 2nd M.S.O. Bldg.,
5th, 6th and 7th Floor,
234/4, Acharya Jagdish Bose Road,
Calcutta-700 020.

Rest of India.

Telegraphic address "PATENTS".

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

Fees :—The fees may either be paid in cash or may be sent by Money Order or Postal Order, payable to the Controller at the appropriate Offices or by Bank Draft or Cheque, payable to the Controller drawn on a scheduled bank at the place where the appropriate office is situated.

पेटेंट कार्यालय

एकसूच तथा अभिकल्प

कलकत्ता, दिनांक 2 फरवरी 1991

पेटेंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार

पेटेंट कार्यालय का प्रधान कार्यालय कलकत्ता में स्थित है तथा अम्बई, दिल्ली एवं मद्रास में इसके शाखा कार्यालय हैं, जिनके प्रादेशिक क्षेत्राधिकार जोन के आधार पर निम्न रूप में प्रदर्शित हैं :—

पेटेंट कार्यालय शाखा, टोडी हस्टेट,
सीसरा तल, लोअर परेल (पश्चिम),
अम्बई-400 013

गुजरात, महाराष्ट्र तथा मध्य प्रदेश राज्य क्षेत्र एवं संघ शासित क्षेत्र गोआ, दमन तथा विव एवं दादरा और नगर हवेली।

तार पता—''पेटेंटोफिस''

पेटेंट कार्यालय शाखा,
इकाई सं० 401 से 405, सीसरा तल,
नगरपालिका बाजार भवन,
सरस्वती मार्ग, करोल बाग,
नई दिल्ली-110 005

हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब, राजस्थान तथा उत्तर प्रदेश राज्य क्षेत्रों एवं संघ शासित क्षेत्र चंडीगढ़ तथा दिल्ली।

तार पता—''पेटेंटोफिक''

पेटेंट कार्यालय शाखा,

61, बालाजाह रोड,

मद्रास-600 002

आंध्र प्रदेश, कर्नाटक, केरल, तमिलनाडु राज्य क्षेत्र एवं संघ शासित क्षेत्र पाण्डिचेरी, लक्षद्वीप, मिनिक्कॉय तथा एमिनिदिवि द्वीप।

तार पता—''पेटेंटोफिस''

पेटेंट कार्यालय (प्रधान कार्यालय),
निजाम पैलेस, द्वितीय बहुतलीय कार्यालय
भवन 5, 6 तथा 7वां तल,
234/4, आचार्य जगदीश बोस रोड,
कलकत्ता-700 020

भारत का अवशेष क्षेत्र

तार पता—''पेटेंट्स''

पेटेंट अधिनियम, 1970 या पेटेंट नियम, 1972 में अपेक्षित सभी आवेदन-पत्र, सूचनाएं, विवरण या अन्य प्रलेख पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में ही प्राप्त किए जाएंगे।

शुल्क : —शुल्कों की अदायगी या तो नकद की जाएगी अथवा उपयुक्त कार्यालय में नियंत्रक को भुगतान योग्य घनादेश अथवा डाक आदेश या जहां उपयुक्त कार्यालय स्थित है, उस स्थान के अनुसूचित बैंक से नियंत्रक को भुगतान योग्य बैंक ड्राफ्ट अथवा चेक द्वारा की जा सकती है।

CORRIGENDUM

27th December, 1990

In respect of application for Patent No. 76/BOM/89 and 77/BOM/89 ante-dated under Section 16 of Patents Act, 1970, read 23-10-1987 as the date in place of 24-7-86 published in the Gazette of India, Part III, Section 2 dated 1-9-90.

APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE
234/4, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-20

The dates shown in the crescent brackets are the dates claimed under Section 135 of the Patents Act, 1970.

26th December, 1990

1058/Cal/90 E.I. Du Pont De Nemours and Company. Halogen exchange fluorination.

1059/Cal/90 E.I. Du Pont De Nemours and Company. Halogen exchange fluorination.

1060/Cal/90 Ishihara Sangyo Kaisha Ltd. Imidazolidine derivatives, process for producing the same and pesticides containing the same.

1061/Cal/90 Licentia Patent-Verwaltungs-GmbH. An interpolative A/D converter for the band-pass signals.

1062/Cal/90 Eaton Corporation. Electromechanical motor reversing.

1063/Cal/90 Samsung Electron Devices Co. Ltd. Inner shield coupling clip.

1064/Cal/90 Samsung Electron Devices Co. Ltd. Clip for coupling inner shield with frame.

31st December, 1990

1065/Cal/90 Lanxide Technology Co. Lp. Method for producing a self-supporting ceramic composite structure.
[Divisional dated 4th September, 1987]

1st January, 1991

1/Cal/91 Lanxide Technology Company, L.P. Method of making ceramic composite bodies and bodies made thereby.

2/Cal/91 Zimpro Passavant Environmental Systems, Inc. Control valve with displacement-compensating seal.

3/Cal/91 C.C. Egelhaaf Maschinenfabrik GmbH. Stay rod for use particularly in conjunction with metal heddle frame rails.

4/Cal/91 Stopinc Aktiengesellschaft. Method of automatically starting pouring of a continuous casting installation.

5/Cal/91 Johnson & Johnson Medical, Inc. Process for preparing a neutralized oxidized cellulose product and its method of use.

6/Cal/91 Eaton Corporation. A change gear mechanical transmission.
[Divisional dated 17th February, 1988]

7/Cal/91 E.I. Du Pont De Nemours and Company. An improved polyester fiber fill blend.
[Divisional dated 19th October, 1987]

8/Cal/91 Johnson & Johnson Consumer Products, Inc. Skin care compositions.

9/Cal/91 The Research Foundation for Microbial Diseases of Osaka University. Non-A, Non-B hepatitis virus genomic cDNA and antigen polypeptide.

10/Cal/91 E.I. Du Pont De Nemours and Company. Processing aid for polymers.
[Divisional dated 7th July, 1989]

11/Cal/91 Westinghouse Electric Corporation. Circuit breaker with rating plug having memory.

12/Cal/91 Himont Incorporated. Components and catalysts for the polymerization of olefins.

13/Cal/91 Himont Incorporated. Components and catalysts for the polymerization of olefins.

APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, 61, WALLAJAH ROAD, MADRAS-600 002

10th December, 1990

993/Mas/90 Isaac Abraham. Folding type moped/motor cycle.

994/Mas/90 Central Power Research Institute. Fluidised bed up-draft multifuel biomass gasifier.

995/Mas/90 Vasukunjan Jothyshalayam Bose. Accidental safety brake for vehicles having hydraulic brakes.

996/Mas/90 Puthuparampil Varughese Devasia & George Sebastian Puthuparambil. A device for channelling rain water away from the tapping zone of a latex yielding tree and for preventing the spread of moisture in the said zone.

997/Mas/90 The Board of Governors of Wayne State University. Process for the preparation of vinyl ethers.

998/Mas/90 Maschinenfabrik Rieter AG. Apron drafting arrangement as well as a spinning machine with a plurality of apron drafting arrangements of this type.

11th December, 1990

999/Mas/90 FMC Corporation. Method and apparatus for forming thick complex shaped composites.

1000/Mas/90 Comalco Limited. Casting of Hypereutectic Al-Si alloys. (December 11, 1989; Australia).

12th December, 1990

1001/Mas/90 M. Shanmugavel. Napthol M.S.

1002/Mas/90 Usinor Sacilor. Device for the continuous casting of thin metal products between two colled rotating rolls.

1003/Mas/90 Asea Brown Boveri Ltd.. A drive for a feed valve.

13th December, 1990

1004/Mas/90 Mahadeva Subbaraya Venkataramana Sarma. Liquified air regenerative engine.

1005/Mas/90 C. Selvakumar. Self-governor.

1006/Mas/90 Zellweger Uster AG. Method for the qualitative classification of electronically cleared yarn.

1007/Mas/90 Zellweger Uster AG. Method for the quality assessment of yarns and device to carry out the method.

1008/Mas/90 Motley Manufacturing Agencies Pty. Ltd.. Hockey Stick. (December 15, 1989; Australia).

1009/Mas/90 Lacrex S.A. Detachable clamping and connecting device for pipes, hoses, rods, cables or the like.

1010/Mas/90 Caterpillar Inc. Intermittently-fed high pressure gasifier.

1011/Mas/90 Rank Taylor Hobson Limited. Metrological apparatus. (March 4, 1986; United Kingdom). Divisional to Patent Application No. 147/Mas/87.

14th December, 1990

1012/Mas/90 Ballaji Saravanakumar. Stone separator in rice boiling.

1013/Mas/90 BASF Aktiengesellschaft. A process for working up aqueous mother liquors.

1014/Mas/90 Lacrex SA. Multipart, air-conditioned packaging container.

1015/Mas/90 Sollac. Method and device for forming a sheet-metal blank.

1016/Mas/90 Sollac. Method for producing a part of non-developable shape from a sheet-metal blank, and shaped part obtained by this method.

1017/Mas/90 VST Industries Limited. An improved process for producing cigarette blend of expended cut stems and cut lamina and an apparatus for carrying out the same.

1018/Mas/90 Mr. Rene Hutt & Mr. Emile Ledevuil. Fillings based on a foam binding agent and their production process.

17th December, 1990

- 1019/Maa/90 N.P.M.S. Kaja Nazeemudeen. Automatic controlling of all electrical appliances in a pre-set time called multi-controller.
- 1020/Maa/90 Connell Limited Partnership. A method of controlling a press (Divisional to Patent Application No. 21/Maa/87).
- 1021/Maa/90 Palitex Project-company GMBH. A thread brake mechanism for a spindle assembly of a thread processing machine. (Divisional to Patent Application No. 113/Maa/87).
- 1022/Maa/90 Itex Enterprises Inc. Method and apparatus for mixing solid or semi-solid wastes with additives.
- 1023/Maa/90 Eniricerche S.p.A. and Snamprogetti S.p.A. Process for preparing a sulphonated dispersant from petroleum asphalt fractions.
- 1024/Maa/90 G. T. M. Batiment ET Travaux Publics. Overflow spillway for dams, weirs and similar structures.
- 1025/Maa/90 Sepracor inc. Enzymatic resolution systems and compounds useful in the systems and their preparation. (Divisional to Patent Application No. 261/Maa/89).

18th December, 1990

- 1026/Maa/90 Caterpillar Inc. Track adjusting mechanism.

19th December, 1990

- 1027/Maa/90 M. K. Raju. Water guard.
- 1028/Maa/90 F. C. B. High intensity magnetic separator for wet separation.
- 1029/Maa/90 Asea Brown Boveri Ltd. Method for premixed combustion of a liquid fuel.
- 1030/Maa/90 Caterpillar Inc. A track assembly. (Divisional to Patent Application No. 362/Maa/87).

20th December, 1990

- 1031/Maa/90 Refurbished Turbine Components Limited. (December 22, 1989; United Kingdom).
- 1032/Maa/90 Dalkin Industries Ltd. Process for preparing penta-fluorodichloropropanes.
- 1033/Maa/90 BIC Corporation. Bidirectional selectively actuable lighter.

21st December, 1990

- 1034/Maa/90 Rev. Fr. Thomas Felix (New teaching aid for the mentally retarded children).
- 1035/Maa/90 Comalco Aluminium Limited. Ceramic Microspheres. (December 22, 1989; Australia).

OPPOSITION PROCEEDINGS

(1)

The Opposition entered by M/s. Hindustan Lever Limited to the grant of a patent on application for Patent No. 158190 made by M/s. Godrej Soaps Private Limited as notified in the Gazette of India, Part III, Section 2 dated 7th March, 1987 has been dismissed and it is ordered that the application will proceed for sealing with some amendments.

(2)

The Opposition entered by M/s. Piaggio & CSPA Italy to the grant of a Patent on Application No. 156941 made by M/s. Jay Hind Industries Limited, Pune as notified in Part III, Section 2 of the Gazette of India dated the 19th July, 1986 has been allowed and the grant of a patent on application No. 156941 has been refused.

PATENTS SEALED

163074 163491 164920 165250 166116 166133 166134 166270 166320
166365 166400 166419 166459 166461 166462 166463 166464 166465
166481 166486 166496 166497

CAL — 9

DEL — 5

MAS — 6

BOM — 2

RENEWAL FEES PAID

146497 146851 147320 147567 147697 147698 147699 147700 148065
148419 149124 149184 149669 149902 150018 150029 150105 150499
150732 150971 151318 151681 151789 151961 152193 152278 152292
153092 153222 153402 153695 153735 153736 154036 154099 154140
154141 154526 154539 154540 154797 154817 155244 155571 155973
156010 156023 156143 156183 156188 156226 156508 156581 156588
156677 156743 156747 156766 156875 156964 157175 157410 157464
157465 157572 157722 157760 157830 157853 158014 158157 158159
158192 158632 158949 159223 159236 159237 159267 159356 159446
159530 159609 159610 159938 160109 160324 160329 160855 160419
160426 160968 160983 161099 161254 161342 161746 161967 161994
162208 162278 162421 162400 162619 162729 162760 162837 162971
162983 162988 163008 163010 163012 163013 163014 163080 163129
163139 163142 163143 163148 163151 163156 163194 163204 163292
163296 163311 163312 163331 163342 163346 163353 163361 163362
163499 163502 163564 163573 163605 163620 163669 163728 163771
163875 164063 164068 164141 164199 164200 164369 164512 164730
164736 164902 165321 165368 165386 165534 165559 165691 165710
165715 165742 165744 165825 165830 165874 165902 166065 166082
166378

COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the Applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed alongwith the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

The classifications given below in respect of each specification are according to Indian Classification and International Classification.

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying charges per page are Rs. 4/-.

Ind. Cl.: 116 C, 116 G [GROUP XLIX]
Int. Cl.⁴: B 65 G 15/08.

168071

A TUBULAR BELT CONVEYOR SYSTEM.

Applicant: CONTINENTAL GUMMI-WERKE AKTIENGESSELLSCHAFT, OF KONIGSWORTHER PLATZ 1, 3000 HANNOVER, FEDERAL REPUBLIC OF GERMANY, A GERMAN COMPANY.

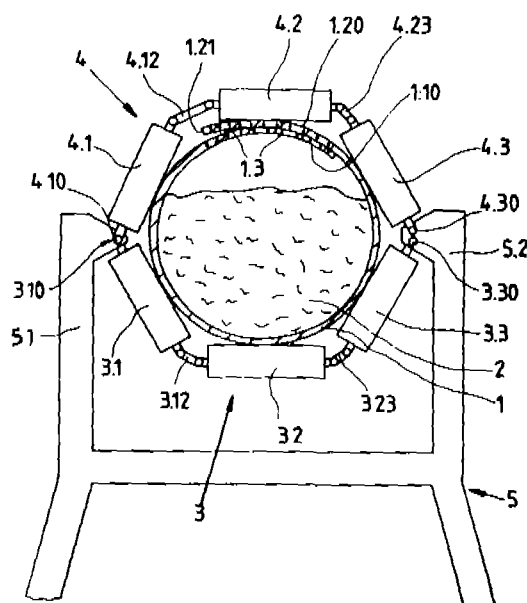
Inventor: WILHEIM ENGST.

Application No. 611/Mas/86 filed on 30th July, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

9 Claims

A tubular belt conveyor having a conveyor belt made of rubber or rubber-like plastic material containing filamentary reinforcing members extending in the longitudinal direction of the belt, the said conveyor belt being closable by overlapping its longitudinal edges to form a tubular belt, the said tubular belt being supported all-round by supporting rollers forming upper and lower roller garlands in the sections of the conveyor belt closed in a tubular manner, said lower roller garland surrounding the lower half of the cross-section of the tubular belt and said upper roller garland surrounding the upper half of the cross-section of the tubular belt.



Compl. Specn. 10 Pages.

Drwg. 1 Sheet.

स्वीकृत सम्पूर्ण विनिर्देश

एतद्वारा यह सूचना दी जाती है कि सम्बद्ध आवेदनों में से किसी पर पेटेंट अनुदान का विरोध करने के इच्छुक कोई व्यक्ति, इसके निर्गम की तिथि से 4 महीने या अग्रिम ऐसी अवधि जो उक्त 4 महीने की अवधि की समाप्ति के पूर्व पेटेंट नियम, 1972 के तहत विहित प्रपत्र-14 पर आवेदित एक महीने की अवधि से अधिक न हो, के भीतर कमी भी नियंत्रक, एकस्य को ऐसे विरोध की सूचना विहित प्रपत्र-15 पर वे सकते हैं। विरोध सम्बन्धी लिखित पक्षतय, उक्त सूचना के साथ अथवा पेटेंट नियम, 1972 के नियम 36 में यथाविहित इसकी तिथि के एक महीने के भीतर ही फाइल किए जाने चाहिए।

"प्रत्येक विनिर्देश के संदर्भ में नीचे दिए वर्गीकरण, भारतीय वर्गीकरण तथा अन्तरराष्ट्रीय वर्गीकरण के अनुरूप हैं।"

नीचे सूचीगत विनिर्देशों की सीमित संख्या में मुद्रित प्रतियाँ, भारत सरकार बुक डिपो, 8, किरण शंकर राय रोड, कलकत्ता में विक्रय हेतु यथासमय उपलब्ध होंगी। प्रत्येक विनिर्देश का मूल्य 2/- रु० है (यदि भारत के बाहर भेजे जाएं तो अतिरिक्त डाक खर्च)। मुद्रित विनिर्देश की आपूर्ति हेतु मांग पत्र के साथ निम्नलिखित सूची में यथाप्रदर्शित विनिर्देशों की संख्या संलग्न रहनी चाहिए।

रूपांकन (चित्र आरेखों) की फोटो प्रतियाँ, यदि कोई हों, के साथ विनिर्देशों की टंकित अथवा फोटो प्रतियों की आपूर्ति पेटेंट कार्यालय, कलकत्ता द्वारा विहित लिप्यान्तरण प्रमार उक्त कार्यालय से पत्र-व्यवहार द्वारा सुनिश्चित करने के उपरांत उसकी अदायगी पर की जा सकती है। विनिर्देश की पृष्ठ संख्या के साथ प्रत्येक स्वीकृत विनिर्देश के सामने नीचे वर्णित चित्र आरेख कागजों को जोड़कर उसे 4 से गुणा करके (क्योंकि प्रत्येक पृष्ठ का लिप्यान्तरण प्रमार 4/- रु० है) फोटो लिप्यान्तरण प्रमार का परिकलन किया जा सकता है।

Ind. Cl.: 127-I [GROUP LXV(1)]
Int. Cl.⁴: G 01 N 19/02.

168072

A DEVICE FOR MEASURING STATIC AND KINETIC FRICTION COEFFICIENT OF A MATERIAL WITH THE SAME MATERIAL OR WITH ANY OTHER MATERIAL.

Applicant: THE SOUTH INDIA TEXTILE RESEARCH ASSOCIATION, COIMBATORE AERODROME P.O., COIMBATORE-641014, INDIA, A SOCIETY REGISTERED UNDER THE SOCIETIES REGISTRATION ACT, 1860.

Inventors: (1) TARAKAD VEDAMURTHY RATNAM, (2) AYIKUDY RAMASUBRAMANIA IYER KALYANARAMAN, (3) RAMASWAMY PRAKASAM.

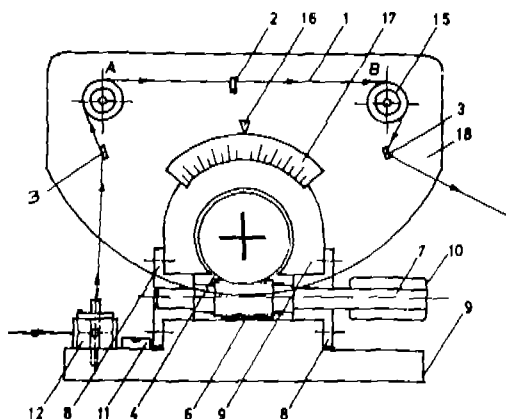
Application No. 616/Mas/86 filed on 31st July, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

5 Claims

A device for the measurement of static and kinetic friction coefficient of a material with the same material or with any other material comprising:

two pulleys A and B (15) mounted on a stand (18), tensioners (12) to stretch the first material (1) whose friction is to be estimated on the said pulleys, the second material (2) with which the friction of the first material is to be estimated being placed in contact with the first material, a tilting means consisting of a stand mounted on a worm and gear (4, 5, 6, 7, 8, 9) with a rotating handle (10) to tilt the first material with respect to the second material for changing the angle of contact between them, an angle measuring means to measure the angle of tilt and a driving means to drive the first material under tension wherein the said first material is kept static for measurement of static friction coefficient and driven at a constant desired speed to measure the kinetic coefficient of friction at the said desired speed.



Compl. Specn. 7 Pages.

Drg. 1 Sheet.

Ind. Cl.: 147 C, 147 E, 168 C [GROUPS LX (3), LI (4)] 168073
Int. Cl. 4: H 04 R 23/00.

MAGNETORESISTIVE TRANSDUCER FOR READING DATA ON A MAGNETIC RECORDING MEDIUM.

Applicant: INTERNATIONAL BUSINESS MACHINES CORPORATION, OF OLD ORCHARD ROAD, ARMONK, NEW YORK 10504, UNITED STATES OF AMERICA, A COMPANY ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF NEW YORK, U.S.A.

Inventor: CHING HWA TSANG.

Application No. 641/Mas/86 filed on 7th August, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

12 Claims

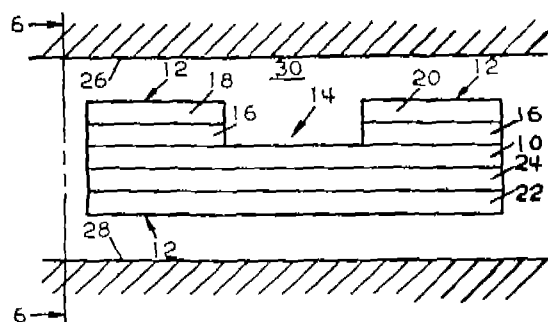
A magnetoresistive transducer for reading data on a magnetic recording medium comprising:

a thin film magnetoresistive element having end regions separated by a central region,

means for producing a longitudinal bias in only the end regions of said magnetoresistive element, to maintain the end regions of the magnetoresistive element in a single domain state,

means for producing a transverse bias in at least a part of the central region of said magnetoresistive element, to maintain said part of the central region of the magnetoresistive layer in a linear response mode; and

conductive means connected to said magnetoresistive element within said central region to define a detection region so that resistance changes in said detection region produced by magnetic fields which are intercepted by the magnetoresistive element can be detected.



Compl. Specn. 14 Pages

Drgs. 2 Sheets.

Ind. Cl.: 32 D [GROUP IX (1)].
Int. Cl. 4: C 10 M 101/04.

168074

A PROCESS FOR PREPARING AN ORGANIC MOLYBDENUM COMPLEXES.

Applicant: R T VANDERBILT COMPANY, INC., A NEW YORK CORPORATION, OF 30 WINFIELD STREET, NORWALK, CONNECTICUT 06855, UNITED STATES OF AMERICA.

Inventors: (1) EUGENE VANNESS ROWAN, (2) THOMAS JOHN KAROL & (3) HOMER HAYNES FARMER.

Application No. 647/Mas/86, filed on 11th August, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

3 Claims

A process of preparing an organic molybdenum complex which comprises reacting (a) 1.0 mole of glyceryl esters of fatty oils having 12 or more carbon atoms, (b) 1.0 to 2.5 moles diethanolamine, and (c) an oxygen containing molybdenum compound sufficient to yield 0.1 to 6.0 percent of molybdenum based on the weight of the complex, the reaction being carried out at 70 to 160°C.

Compl. Specn. 11 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 32-E & 171—[GROUPS-IX(1) & XXXVIII(4)] 168075
 Int. Cl.⁴ : C 08 F 261/04.

A PROCESS FOR THE MANUFACTURE OF A CROSSLINKED POLYMERIC HYDROGEL.

Applicant : CIBA-GEIGY AG, KLYBECKSTRASSE 141, 4002 BASLE, SWITZERLAND, A SWISS CORPORATION.

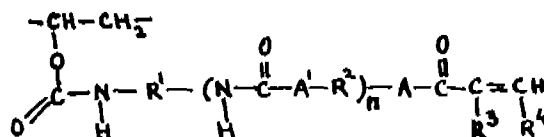
Inventors : (1) MERRILL GOLDENBERG, (2) KARL FRIEDRICH MUELLER.

Application No. 650/Mas/86, filed on 12th August 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

19 Claims

A process for the preparation of a polymeric hydrogel comprising reacting a polymeric vinyl alcohol having from 0.5 to 20% based on the number of hydroxyl groups of said polyvinyl alcohol units of formula I of the accompanying drawings



Formula I

wherein R¹ and R² are independently alkylene, arylene, a divalent cycloaliphatic group, arylene-alkylene, alkylene-arylene or arylenealkylenearylene, n is 0, A¹ is oxygen or NR¹, A is oxygen, NR² or a bivalent ureido group, R³ is hydrogen or methyl, R⁴ is hydrogen, methyl or COOR⁵, where R⁵ is hydrogen or lower alkyl, with the proviso that if R³ is methyl, R⁴ is hydrogen, R¹ & R² are independently hydrogen or lower alkyl, with a known vinylic monomer in an organic solvent in the presence of a known free radical initiator to produce a hydrogel having upto 80 units of the vinylic monomer cross linked per unit of formula I of the accompanying drawings.

Compl. Specn. 56 Pages.

Drg. 1 Sheet.

Ind. Cl. : 172-D_{4 & 6}—[GROUP-XX] 168076
 Int. Cl.⁴ : D 01 H 7/882.

AN OPEN END SPINNING APPARATUS.

Applicant : SCHUBERT & SALZER MASCHINENFABRIK AKTIENGESELLSCHAFT, OF FRIEDRICH-EBERT-STRASSE 84, 8070 INGOLSTADT, GERMANY, A GERMAN COMPANY.

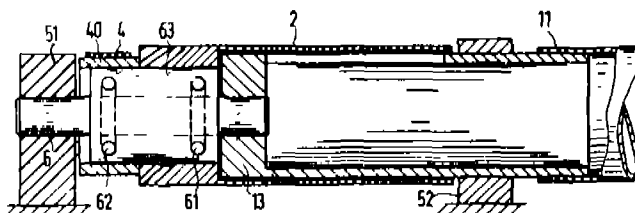
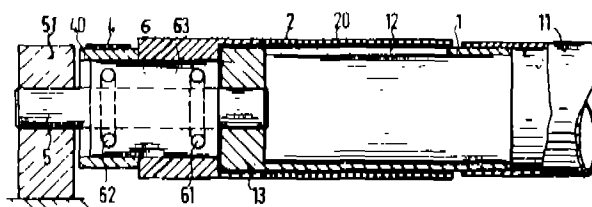
Inventor : KARL HANDSCHUCH.

Application No. 699/Mas/86, filed on 29th August, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

12 Claims

An open end spinning apparatus with two adjacent friction rollers (2, 3) which form a spinning nip and are driven in the same direction, of which at least one has a perforated covering (2) which is mounted in cantilever fashion at one end, in the interior of the said covering is a suction insert (1) having a suction slit (12), the said suction insert is connected to a vacuum source characterised in that the covering (2) is mounted on a shaft (5) having two ends of which one end is inserted into the suction insert (1) and in that the suction insert (1) is inside the covering (2) immediately behind it and has a uniform cross section up to the connection to the suction line (11).



Compl. Specn 14 Pages.

Drg. 1 Sheet.

Ind. Cl. : 172 B [GROUP XX]
 Int. Cl.⁴ : D 01 H 7/882.

168077

METHOD AND DEVICE FOR PRODUCING YARN BY JOINING THREAD IN A OPEN-END FRICTION SPINNING APPARATUS.

Applicant : SCHUBERT & SALZER MASCHINENFABRIK AKTIENGESELLSCHAFT, OF FRIEDRICH-EBERT-STRASSE-84, 8070 INGOLSTADT, WEST GERMANY, A GERMAN COMPANY.

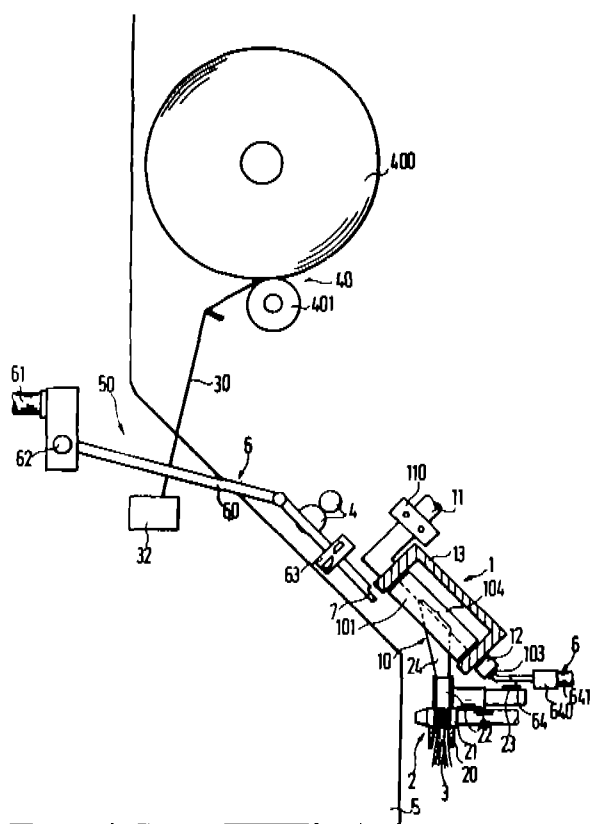
Inventors : (1) KURT LOVAS, (2) WERNER BILLNER.

Application No. 700/Mas/86, filed on 29th August, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

28 Claims

A method of producing yarn by joining the thread in an open-end friction spinning apparatus comprising driving two friction spinning elements in the same direction and forming a negative-pressure nip, supplying the fibres to the nip into the thread forming zone, withdrawing the fibre material in the form of a continuous thread from the thread-forming zone, delivering the fibres to the nip and are twisted into a bunch and the fibre bunch is conveyed in the longitudinal direction of the nip and partly out of it, where it is gripped and delivered to a spooling and winding device.



Compl. Specn. 37 Pages.

Drgs. 5 Sheets.

Ind. Cl. : 185 B [GROUP XVIII].

168078

Int. Cl. 4 : A 23 F 3/08.

A MACHINE FOR FERMENTING TEA.

Applicant & Inventor : HARIPRASAD PRASANNA, 240 T.T.K. ROAD, (MOWBRAYS ROAD), MADRAS 600 018, TAMIL NADU, INDIA, INDIAN NATIONAL.

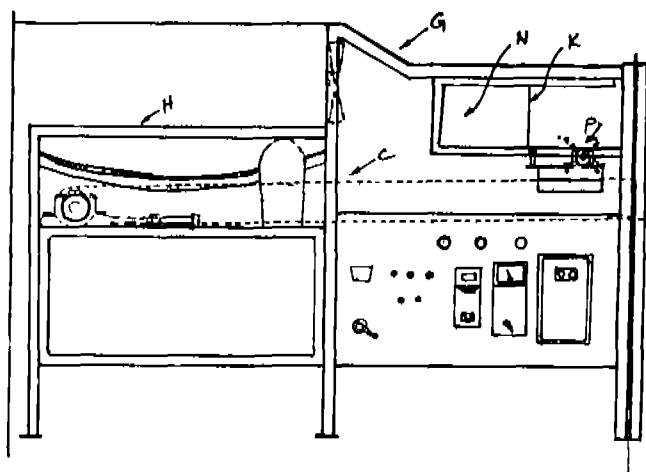
Application No. 718/Mas/86, filed on 8th September, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

9 Claims

A machine for fermenting tea comprising a chamber housing a conveyor; inlet and outlet openings for the chamber, the inlet opening for feeding tea dhools into the chamber and on to the conveyor, the outlet opening for discharging fermented tea leaves thereat; one or more ultraviolet tubes or bulbs within the chamber and over the conveyor, for emitting ultraviolet radiation on the conveyed tea dhools; at least one rotary spreader within the chamber and over the conveyor, the spreader consisting of a roller with peripheral blades for uniformly spreading the tea dhools on the conveyor and thus regulating the thickness of the tea dhool layer thereon; characterised by at least one rotary plough within the chamber and over the conveyor, the plough consisting of a roller with peripheral blades, needles or like members

for raking the tea dhools on the conveyor and uniformly exposing the same to ultraviolet radiation, the tea dhools so exposed being discharged at the outlet end.



Compl. Specn. 10 Pages.

Drgs. 6 Sheets.

Ind. Cl. : 1-A—[GROUP-XLII(1)]

168079

Int. Cl. 4 : C 09 J 3/14

A PROCESS FOR PREPARING A SUBSTANTIALLY HOMOGENEOUS, ELECTRICALLY-CONDUCTIVE PRESSURE-SENSITIVE ADHESIVE MATERIAL.

Applicant : MINNESOTA MINING AND MANUFACTURING COMPANY, A CORPORATION OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF 3M CENTER, SAINT PAUL, MINNESOTA 55101, UNITED STATES OF AMERICA.

Inventor : MICHAEL ROY ENGEL

Application No. 738/MAS/86 filed on 18th September, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

11 Claims

A process for preparing a substantially homogeneous, electrically-conductive, pressure-sensitive adhesive material comprises free radical polymerizing of an adhesive precursor consisting at least one hydrogen bond donating monomer such as herein described, at least one hydrogen accepting monomer such as herein described, a free radical initiator and a neutralizing base in a plasticizing, electrically-conductive solution consisting of 0 to 98 % by weight a water-soluble polar organic compound, 0 to 12 % by weight a water soluble salt such as herein described and 2 to 100 % by weight water, to form a copolymer matrix in the electrically conductive solution providing a homogeneous, electrically-conductive, pressure-sensitive adhesive material wherein the ratio of hydrogen bond accepting sites to hydrogen bond donating sites on the respective monomers is from 1:3 to 6:1, the adhesive precursor contains from 12 % to 50 % by weight of total monomers and the hydrogen bond donating sites on the hydrogen bond donating monomer are from 5 % to 95 % neutralized.

Compl. Specn. 34 Pages.

Drgs. 2 Sheets.

Ind. Cl.: 24 B, 24 F [GROUP IV]
Int. Cl.: F 16 D 51/00

168080

CLASS: 55-E4; F.
Int. Cl.: C 12 m 1/00, 3/00;
C 12 n 1/02, 1/36, 3/00.

168081

A DRUM BRAKE

Applicant: LUCAS INDUSTRIES PUBLIC LIMITED COMPANY A BRITISH COMPANY, GREAT KING STREET WEST MIDLANDS BIRMINGHAM 19, GREAT BRITAIN.

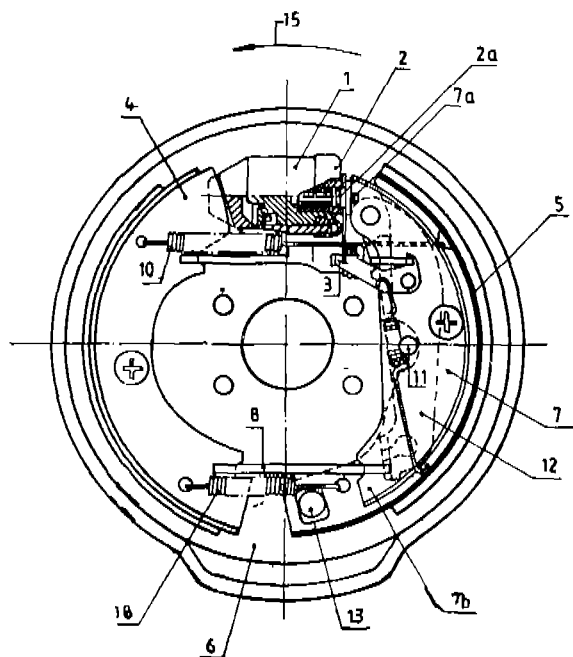
Inventor: HELMUT HEIBEL

Application No. 750/Mas/86 filed on 24th September, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

9 Claims

A drum brake comprising a drum and at least a first and second brake shoe (4, 5) a wheel brake cylinder (1) having a piston 2 for hydraulically actuating said brake none of said brake shoes (4, 5) upon breaking in forward travelling direction, being supported leadingly and self boosting said first brake shoe (4) upon braking in backward travelling direction being supported leadingly and self-boosting, a lever (7) pivotally connected intermediate its ends to said second brake shoe and having two arms (7a, 7b) one of said arms 7(a) abutting against and being movable by said piston of said wheels brake cylinder (1) whereas the other arm (7b) acts on said first brake shoe (4) via a pressure transfer element (8), said piston acting only on said lever, said lever urging the second brake shoe (5) against the drum in response to movement of said piston against said one arm (7a) and reaction of said other arm (7b) against said pressure transfer element (8) upon engagement of said first shoe with said drum.



Compl. Specn. 10 Pages.

Drgs. 3 Sheets.

A METHOD OF SEPARATING ATLEAST A PARTICULAR GROUP OF BIOLOGICAL CELLS AND ARRANGEMENT FOR SELECTING THE SAME.

Applicant: BAR-ILAN UNIVERSITY, OF RAMAT-GAN, ISRAEL.

Inventors: (1) ARYE WEINREB, (2) MORDECHAI DEUTSCH.

Application No. 841/Cal/1986 filed on 18th November, 1986.

[Divisional of application No. 564/Cal/1983 Anti-dated to 5th May, 1983]

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

13 Claims

A method for separating a particular category of selected biological cells based on size from an admixture thereof with at least one other category of biological cells, which comprises the steps of:

- (a) applying said admixture to the upper surface of at least one optionally supported substantially planar carrier of preselected thickness, which carrier defines upper and lower and comprises an ordered array of apertures therethrough, said apertures having a preselected configuration with preselected dimensions at the top and bottom surfaces, definable as top and bottom dimensions, respectively, the top dimension of each aperture being larger than the smallest internal cross-sectional dimension and both the thickness of said carrier and the top dimensions of the carrier being of the order of the diameters of the selected cells, whereby cells are disposed on said top surface, only said particular category of selected cells having preselected dimensions are held substantially within the apertures with substantially one cell per aperture;
- (b) washing the said upper surface to remove cells not held substantially within the apertures; and optionally
- (c) attracting any cell to the aperture in which it is to be supported, or expelling any cell from the aperture in which it is supported, said attracting or expelling being effected by electromagnetic means and/or by means for producing a pressure difference across at least a selected portion of said carrier.

Compl. Specn. 52 Pages.

Drgs. 12 Sheets.

CLASS : 148-H

168082

Int. Cl. : A 61 b 6/00; G 01 n 23/00;
G 01 t 1/02; H 05 g 1/00.**AN IMPROVED DOSIMETER FOR IONISING RADIATION APPARATUS FOR SLIT RADIOGRAPHY.**

Applicant : B. V. OPTISCHE INDUSTRIE 'DE OUDE DELFT', OF VAN MIEREVELTLAAN 9, 2612 XE DELFT, THE NETHERLANDS.

Inventors : VLASBLOEM HUGO AND DUINKER SIMON.

Application No. 892/Cal/86, filed on December 9, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

20 Claims

An improved apparatus for slit radiography comprising a slit diaphragm (36) for forming a planar X-ray beam (32), means for scanning a body (33) with the planar X-ray beam (32), controllable attenuation elements (39) which are able to attenuate locally the radiation transmitted or to be transmitted through the slit diaphragm (36), a dosimeter (37) which is located at each instant in the radiation beam (32) transmitted through the slit diaphragm (36) and comprises an oblong shaped casing defining a gas filled chamber (1), the casing having at least two slide walls (7, 8) formed of material transparent to ionizing radiation and a set electrodes (13, 14, 15), the apparatus further comprising means for simultaneously controlling each of the attenuation elements during scanning of the body in response to control signals produced at the electrodes (13, 14, 15) and means (38) for moving the dosimeter (37) in synchronization with the means for scanning the body with the planar X-ray beam (32), characterized in that a dosimeter (37) is used in which the gas filled chamber (1) is an oblong, essentially rectangular cavity which is recessed in the casing and in which there extends a relatively large number of parallel anode wires (13), distributed over essentially the whole length of the gas-filled chamber (1), in a direction essentially transverse to the longitudinal direction of the gas filled chamber and in which the casing is formed of two oblong strips (7, 8) of insulating material, essentially similar in shape, which are each formed into an oblong frame by the provision of an oblong recess, which frames are mounted on each other in a gas-tight manner, the anode wires being situated in the plane of separation between the frames and being secured by the frames in contact with each other.



Fig. 1

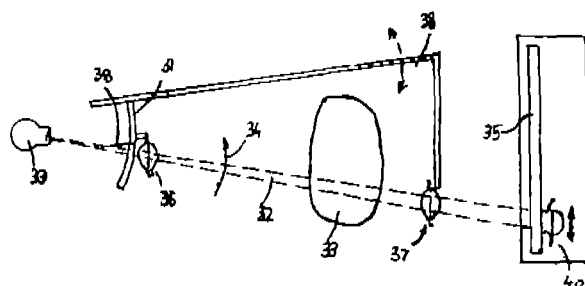


Fig. 3

CLASS : 128-G.

168083

Int. Cl. : G 01 t 1/06.

APPARATUS FOR SLIT RADIOGRAPHY.

Applicant : B. V. OPTISCHE INDUSTRIE 'DE OUDE DELFT', OF VAN MIEREVELTLAAN 9, 2612 XE DELFT, THE NETHERLANDS.

Inventor : VLASBLOEM HUGO.

Application No. 894/Cal/1986, filed on December 9, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

18 Claims

Apparatus for slit radiography comprising a slit diaphragm (36) for forming a planar X-ray beam (32), means for scanning a body (33) with the planar X-ray beam (32), controllable attenuation elements (39) which are able to attenuate locally the radiation transmitted or to be transmitted through the slit diaphragm (36), a dosimeter (37) which is located at each instant in the radiation beam (32) transmitted through the slit diaphragm (36) and comprises an oblong shaped casing defining a gas filled chamber (2), the casing having at least two slide walls (9, 10) formed of material transparent to ionizing radiation and a set of electrodes (11, 12), the apparatus further comprising means for simultaneously controlling each of the attenuation elements during scanning of the body in response to control signals produced at the electrodes (11, 12), and means (38) for moving the dosimeter (37) in synchronization with the means for scanning the body with the planar X-ray beam (32), characterized in that dosimeter (37) is used in which the gas filled chamber (2) is sealed vacuum-tight, one side wall (9) is provided with a plurality of strip-like electrodes (11) extending substantially transversely to a longitudinal direction of the oblong-shaped casing, another side wall (10) is provided with a plate-like electrode (12), each of the strip-like electrodes (11) generating a signal representative of intensity of ionizing radiation, and the strip-like electrodes (11) being divided into a number of groups, the signals from the electrodes (11) belonging to each group being combined to provide the control signal belonging to the group concerned and corresponding to a respective attenuation element (39).

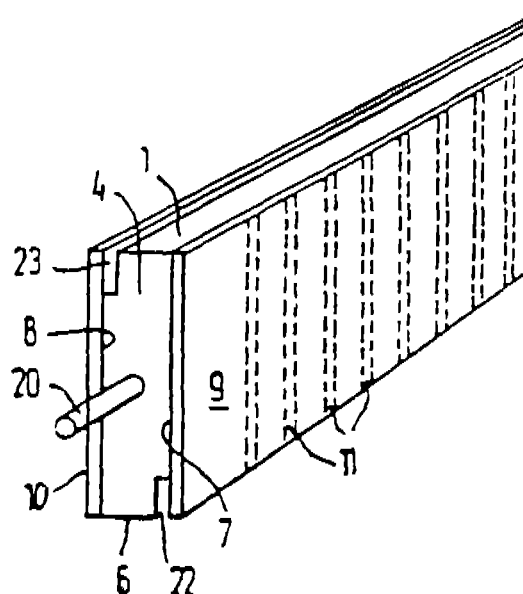


Fig. 1

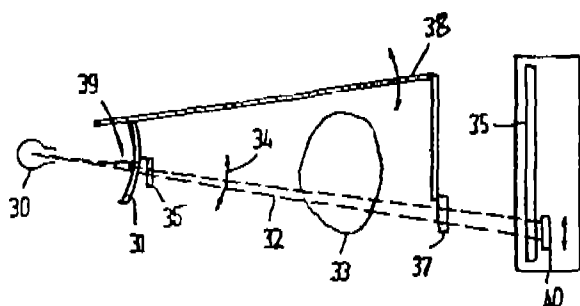


Fig. 7

Compl. Specn. 14 Pages.

Drgs. 2 Sheets.

CLASS : 32-E.

168084

Int. Cl. : C 08 f 293/00.

A PROCESS FOR PREPARING A POLYMODAL, CRAZE RESISTANT, LOW COLOUR, TRANSPARENT LINEAR RESINOUS BLOCK COPOLYMER.

Applicant : PHILLIPS PETROLEUM COMPANY, OF BARTLESVILLE, STATE OF OKLAHOMA, UNITED STATES OF AMERICA.

Inventor : ALONZO GENE KITICHEN.

Application No. 184/Cal/1987 filed on March 9, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

7 Claims

A process for preparing a polymodal, craze-resistant, low colour, transparent linear resinous block copolymer by a sequential mode of block copolymerization and, if desired, forming the copolymer obtained into a blister pack in a conventional manner comprising :

polymerizing in a hydrocarbon diluent at a temperature in the range of -10 to 150 degree C at a pressure sufficient to maintain the reaction mixture substantially in a liquid phase utilizing a hydrocarbon diluent including at least a linear or cycloparaffinic hydrocarbon, at least one monovinylaromatic monomer containing 8 to 12 carbon atoms and at least one conjugated diene monomer containing 4 to 6 carbon atoms in a ratio of about 55 to 95 weight percent monovinylaromatic monomer and 45 to 5 weight percent conjugated diene monomer, by a sequential charge polymerization process wherein at least two separate charges consisting of said monovinylaromatic monomer and an organomonoalkali metal initiator as known per se precede a separate charge of said conjugated diene monomer followed by an additional separate charge of said monovinylaromatic monomer and said initiator before consecutive individual charges of conjugated diene and monovinylaromatic monomers; each monomer charge polymerizes to substantial completion prior to addition of any subsequent charge, the relative amounts of said charges being known per se;

wherein said sequential charge polymerization process employs a 6-stage charge sequence :

Stage 1 : (S)

Stage 2 : (S)

Stage 3 : (B)

Stage 4 : (S)

Stage 5 : (B)

Stage 6 : (S)

wherein (S) represents initiator and monovinylaromatic monomer, (B) represents conjugated diene monomer and (S) represents monovinylaromatic monomer.

thereby producing polymodal, craze-resistant, low color, transparent linear block copolymers with terminal resinous blocks.

Compl. Specn. 20 Pages.

Drg. NIL.

CLASS : 32 E

168085

Int. Cl. : C 08 f 293/00.

A PROCESS FOR PREPARING A POLYMODAL, CRAZE-RESISTANT, LOW COLOUR, TRANSPARENT LINEAR RESINOUS COPOLYMER.

Applicant : PHILLIPS PETROLEUM COMPANY, OF BARTLESVILLE, STATE OKLAHOMA, UNITED STATES OF AMERICA.

Inventors : (1) ALONZO GENE KITICHEN, (2) FRANK JOHN SZALLA.

Application No. 185/Cal/87 filed on 9th March, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

7 Claims

A process for preparing a polymodal, craze-resistant, low color, transparent linear resinous block copolymer by a sequential mode of block copolymerization and, if desired, forming the resulting polymer into a blister pack in a conventional manner comprising:

polymerizing, in a hydrocarbon diluent at a temperature in the range of -10 to 150°C at a pressure sufficient to maintain the reaction mixture substantially in the liquid phase utilizing a hydrocarbon diluent including at least a linear or cycloparaffin, at least one monovinylaromatic monomer containing 8 to 12 carbon atoms and at least one conjugated diene monomer containing 4 to 6 carbon atoms in a ratio of about 55 to 95 weight percent monovinylaromatic monomer and 45 to 5 weight percent conjugated diene monomer, by a sequential charge polymerization process wherein at least two separate charges consisting of said monovinylaromatic monomer and an organomonoalkali metal initiator as known per se precede a separate charge of said conjugated diene monomer followed by an additional separate charge of said monovinylaromatic monomer and said initiator before a final charge of said monovinylaromatic monomer and said conjugated diene monomer; each monomer charge

polymerizes to substantial completion prior to addition of any subsequent charge, the relative amounts of the monomer charges being known per se;

wherein said sequential charge polymerization process employs a 5-stage charge sequence :

Stage 1 : (S_1)

Stage 2 : (S_1)

Stage 3 : (B)

Stage 4 : (S_1)

Stage 5 : (B and S)

wherein (S_1) represents organomonalkali metal initiator and monovinylaromatic monomer, (B) represents conjugated diene monomer and (B and S) represents conjugated diene monomer and monovinylaromatic monomer

thereby producing polymodal, craze-resistant, low color, transparent linear resinous copolymers each with a terminal tapered copolymer block of said monomers.

Compl. Specn. 21 Pages.

Drg. NIL.

CLASS : 32-E.

168086

Int. Cl. : C 08 b 37/00.

A PROCESS FOR A DRY CATIONIZATION OF GALACTOMANNAN.

Applicant : DEGUSSA AKTIENGESELLSCHAFT, OF 6000 FRANKFURT AM MAIN, WEISSFRAUENSTRASSE 9, F. R. GERMANY.

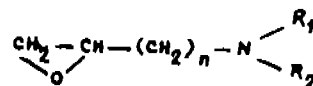
Inventors : (1) DR. REINHARD STÖBER, (2) WOLFGANG FISCHER, (3) MICHAEL HUSS.

Application No. 213/Cal/1987 filed on 13th March, 1987.

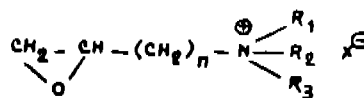
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

7 Claims

A process for the dry cationization of galactomannan comprising reacting a mixture of galactomannan, 0.1 to 3.0% by weight of galactomannan of an alkylidene epoxide and 0.5 to 5.0% by weight of galactomannan of an alkaline reacting hydroxide or oxide selected from the group consisting of alkali metal hydroxide, alkaline earth metal hydroxide and alkaline earth metal oxides at 5° to 60°C, in the presence of 0.1 to 3% by weight, of finely divided silica, based on dry galactomannan, in an intensive mixer, wherein the alkylidene epoxide is represented by the formula (I) or (II) of the accompanying drawings in which $n=1, 2$ or 3 R_1 and R_2 are identical or different alkyl groups with 1 to 4 carbon atoms, R_1 is the benzyl residue or an alkyl group with 1 to 4 carbon atoms, which is different from or identical to R_2 and R_3 , and X(—) is chloride, bromide, sulfate or acetate and per mole of galactomannan taken as anhydrous glucose unit in the dry substance, 0.005 to 0.5 mole epoxide is used.



Formula I



Formula II

Compl. Specn. 18 Pages.

Drg. 1 Sheet.

CLASS : 84-C1.

168087

Int. Cl. : F 23 b 7/00; F 23 c 11/02; C 101 9/10.

PROCESS FOR BURNING HIGH-SALT COAL IN THE PRODUCTION OF STEAM.

Applicant : METALLGESELLSCHAFT AKTIENGESELLSCHAFT, OF REUTER WEG 14, D-6000, FRANKFURT AM MAIN, WEST GERMANY.

Inventors : (1) GURUDAS SAMANT, (2) CARL HAFKE.

Application No. 365/Cal/1987 filed on 5th May, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

5 Claims

In the production of steam, a process for burning high-salt coal which has a chloride content of at least 5% by weight and has in the ash of the coal a total content of at least 10% by weight of alkali chloride and alkali sulfate, wherein the coal has particle sizes below 12 mm and the ash has a melting point not in excess of 800°C, which comprises at least partly covering or impregnating the coal particles with at least one oxide, hydroxide, carbonate or sulfate of calcium or magnesium and burning the covered coal at temperatures having a maximum in excess of the melting point of the ash of the untreated coal.

Compl. Specn. 9 Pages.

Drgs. NIL.

CLASS : 108-C.

168088

Int. Cl. : C 21 c 7/00.

AN IMPROVED INJECTION NOZZLE FOR INSTALLING IN THE WALL OF A LIQUID CONTAINMENT VESSEL E.G. CONTAINING MOLTEN METAL.

Applicant : INJECTALL LIMITED, OF ABBEY HOUSE, 453 ABBEY LANE, SHEFFIELD S 7 2RA, ENGLAND.

Inventors : (1) KENNETH WILLIAM BATES, (2) JOSEPH WILLIAM CUDBY, (3) PETER RONALD DIXON.

Application No. 514/Cal/1987 filed on 3rd July, 1987.

Convention dated 5th July, 1986; No. 8616455; U.K. and 10th October, 1986; No. 8624323; U.K.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

21 Claims

An injection nozzle for installing in the wall of a liquid containment vessel, e.g. containing molten metal therein, said nozzle having a body pierced by at least one initially closed injectant passage for passing injectant into the liquid, including a refractory closing element resistant to percolation of liquid for barring liquid flow along the passage, the element having an integral transverse closing portion spanning the passage and being formed such that the closing portion is detachable from the remainder of said element for opening the passage.

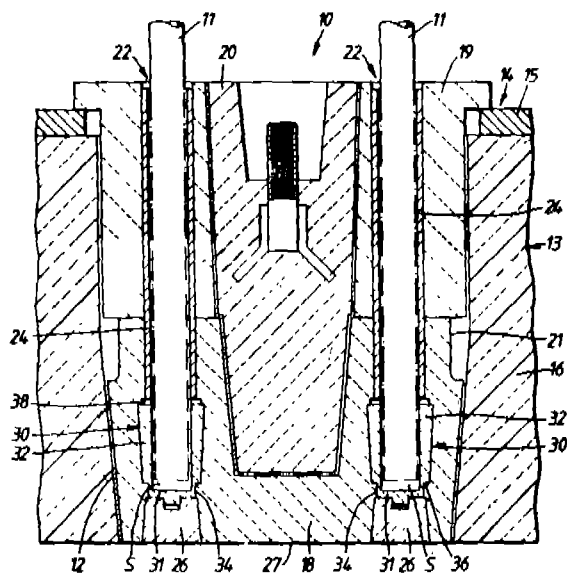


Fig. 1

Compl. Specn. 30 Pages.

Drgs. 4 Sheets.

CLASS : 47-B; C.
Int. Cl. : C 10 j 5/00; E 21 c 43/00.

168089

IMPROVEMENTS IN THE PROCESS FOR GASIFICATION OF GRANULAR SOLID FUELS IN A ROTARY GRATE REACTOR.

Applicant : METALLGESELLSCHAFT AKTIENGESELLSCHAFT, OF REUTERWEG 14, D-6000, FRANKFURT AM MAIN, WEST GERMANY.

Inventor : PAUL DIETER BECKER.

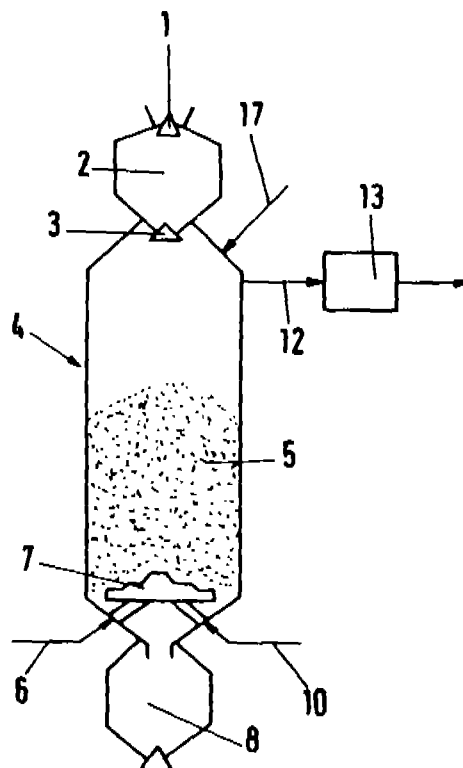
Application No. 517/Cal/1987, filed on 6th July, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

4 Claims

Improvement in the process for gasification of granular solid fuels in a rotary grate reactor, wherein the said solid fuels are charged on to said grate through a locked chamber disposed above the grate and the gasification is carried out in a fixed bed of said solid fuels disposed on the rotary grate by using oxygen containing gases and steam under the pressure of at least 10 bars, characterized by the improvement

wherein said bed is subjected to a pre-heating starting-up treatment by using superheated steam in a super atmospheric pressure from under the said bed so as to let the superheated steam pass into said solid fuel and to preheat the same to temperature of from 200° to 260° C; any condensate of steam obtained in the preheating step being withdrawn from under the bed, whereafter said preheated solid fuels in the bed is subjected to gasification by using oxygen-containing gas under gasification pressure so as to initiate a partial oxygenation of the solid fuel and to raise its temperature to gasification temperature.



Compl. Specn. 10 Pages.

Drg. 1 Sheet.

CLASS : 55-C; 173.
Int. Cl. : A 61 1 9/00.

168090

AN APPARATUS FOR INTRODUCING A VAPORISED CHEMICAL AGENT INTO A COMPRESSED AIR SUPPLY SYSTEM.

Applicant : ANTONIO SOLA, OF LOT 31, BADGERY'S CREEK ROAD, BRINGELLY, NEW SOUTH WALES, AUSTRALIA.

Inventor : ANTONIO SOLA.

Application No. 628/Cal/1987, filed on 11th August, 1987.

(Convention dated 19th August, 1986; No. PH 7546; Australia).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

5 Claims

An apparatus for introducing a vaporised liquid chemical agent into a compressed air supply system comprising :

an air/liquid chemical agent mixing chamber comprising an air supply inlet and means to supply liquid chemical agent from a liquid chemical agent storage chamber into said mixing chamber via said inlet in combination with said air in response to changes in pressure within said mixing chamber, said mixing chamber containing baffle means to promote turbulence and to extract airborne droplets of said liquid chemical agent from within said mixing chamber, liquid chemical agent outlet means connected to said mixing chamber for removing accumulated liquid chemical agent from said mixing chamber, said mixing chamber further comprising outlet means for passing air and vaporised chemical agent of said mixing chamber.

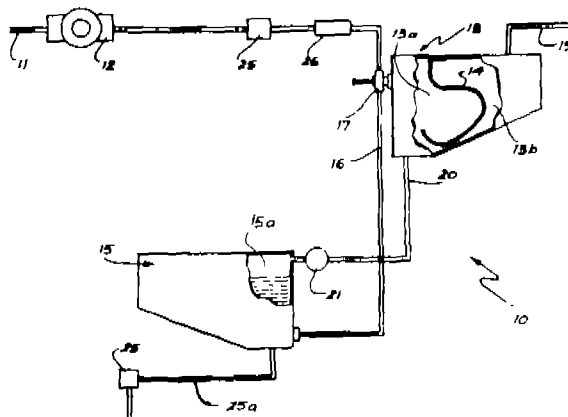


Fig. 1

Compl. Specn. 16 Pages.

Drgs. 3 Sheets.

Ind. Cl. : 25-B & D—[GROUP-XXV(1)].
Int. Cl.⁴ : E 04 C 2/20.

168091

A PROCESS FOR PREPARING A BUILDING AND/OR CONSTRUCTION MATERIAL.

Applicant : SIKA AG, VORM. KASPAR WINKLER & CO., OF TUFFENWIES 16-22, 8048, ZURICH, SWITZERLAND, A SWISS COMPANY.

Inventors : (1) THEODOR A. BURGE, (2) REINHARD SCHWEIZER.

Application No. 755/Maa/86, filed on 24th September, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

10 Claims

A process for preparing a building and/or construction material, comprises mixing and reacting a polymer modified, aqueous dispersion, containing amorphous silicon dioxide and at least one polymer, with at least one inorganic binder, and at least one aggregate; and hardening the same to obtain building and/or construction material; wherein the said polymer modified, aqueous dispersion has the following composition :

1—60% by weight of in water emulsified and/or dispersed and/or dissolved polymers

5—75% by weight of amorphous silicon dioxide

0—5% weight of at least one dispersing aid

0—15% by weight of at least one viscosity controlling agent

0—20% by weight of at least one plasticizing agent and/or setting retarder and/or setting accelerator

0—30% by weight of at least one inorganic phosphorus containing compound, and

24—94% by weight of water,

and is added an amount from 5—100% by weight, referred to the binder.

Compl. Specn. 23 Pages.

Drg. Nil.

Ind. Cl. : 170-B-[GROUP XLIII(4)].
Int. Cl.⁴ : B 24 C 3/12.

168092

AN APPARATUS FOR GENERATING A JET OF AN ABRASIVE MIXTURE OF ABRASIVE MATERIAL AND CARRIER LIQUID.

Applicant : THE BRITISH HYDROMECHANICS RESEARCH ASSOCIATION, A BRITISH COMPANY OF CRANFIELD, BEDFORD MK 43 0AJ, ENGLAND.

Inventors : (1) ROGER ARTINDALE HERON, (2) DAVID HENRY SAUNDERS, (3) ROBERT MARK FAIRHURST.

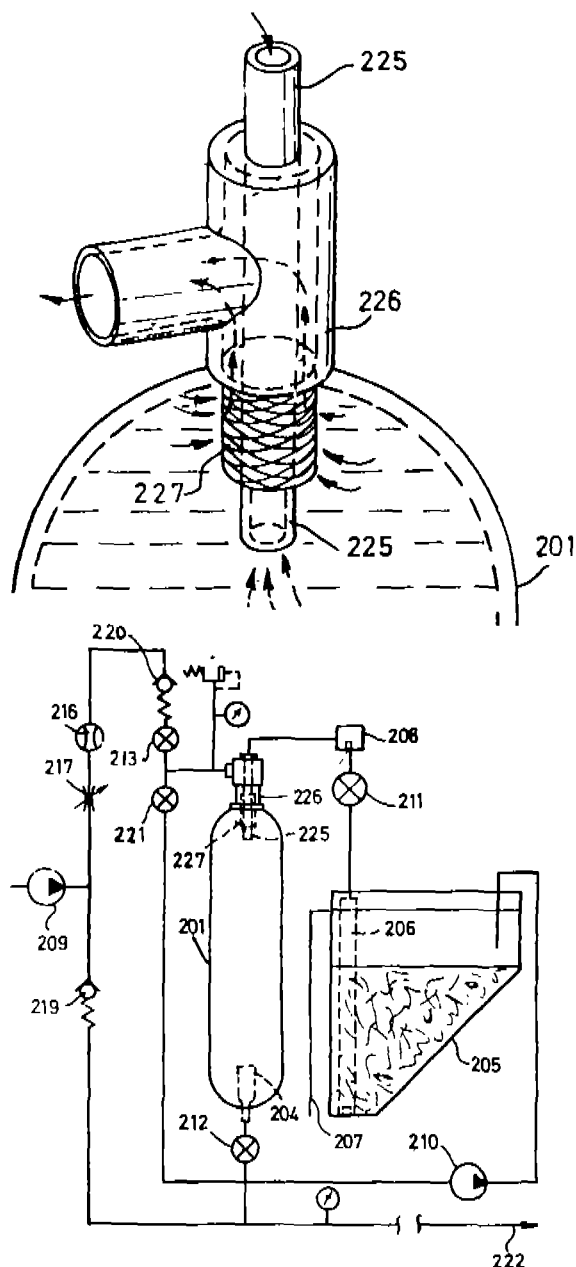
Application No. 802/Maa/86, filed on 10th October, 1986.

Conversion date : October 10, 1985; (No. 8524982; (Great Britain).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

8 Claims

Apparatus for generating a jet of an abrasive mixture of abrasive material and carrier liquid, the apparatus comprising a pressure vessel having inlet, nozzle and outlet conduit communicating therewith, a nozzle connected to the nozzle conduit, means to close the nozzle conduit, a circulating path leading through the inlet and outlet conduits, the pressure vessel and means to add abrasive material to the path, the path being provided with means to isolate the pressure vessel from the remainder of the circulating path, means to force abrasive material around the circulating path when the pressure vessel is not isolated therefrom and the nozzle conduit is closed so as to deposit abrasive material in the pressure vessel, and means to supply carrier fluid under pressure to the pressure vessel when it is isolated from the remainder of the circulating path and the nozzle conduit is open so as to force the abrasive mixture through the nozzle without further pressurisation.



Compl. Specn. 25 Pages.

Drgs. 11 Sheets.

Ind. Cl. : 158-D₃ & 205-B & G. [GROUPS-LII(2)
& LVII]; 126D [LVIII(6)].
Int. Cl.⁴ : G 01 M 1/02.

AN IMPROVED APPARATUS FOR POSITIONING AND
TESTING RAILROAD WHEELS.

Applicant : AMSTED INDUSTRIES INCORPORATED, 3700
PRUDENTIAL PLAZA, CHICAGO, ILLINOIS 60601, UNITED
STATES OF AMERICA, A CORPORATION OF DELAWARE.

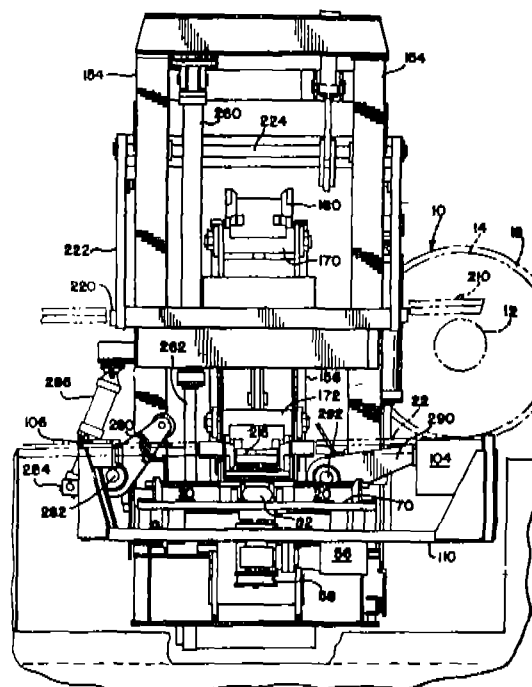
Inventors : (1) CHRISTOPHER SIERADZKI, (2) LYMAN
WOOD JEFFREYS.

Application No. 815/Maa/86, filed on 15th October, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents
Rules, 1972), Patent Office, Madras Branch.

12 Claims

An improved apparatus for positioning and testing railroad wheels said apparatus comprising : means to move a wheel to a first position with the wheel positioned upright in a vertical posture; gripping means to engage the wheel by its rim and flange; swinging means to pivot the gripping means and wheel engaged thereby about a spaced axis from said vertical posture to a substantially horizontal posture; horizontal receiving means for receiving and supporting said wheel at a second position, said receiving means being vertically movable between said second position and a third position spaced therebeneath; supporting means between said second and third positions said supporting means comprising a plurality of blocks defining a horizontal plane; rotating means connected to rotate said supporting means about a vertical axis substantially central of said blocks and gauging means located adjacent said supporting means for detecting variations in at least one of the upper surface and rim surface of said wheel while being rotated on said support means.



Comp. Specn. 17 Pages.

Drgs. 5 Sheets.

Ind. Cl. : 156-G & 195-G—[GROUPS-L & XXIX(3)]
Int. Cl.⁴ : E 03 B 7/00

168094

A PROTECTIVE DEVICE FOR A PRIME MOVER COUPLED
TO A PUMP

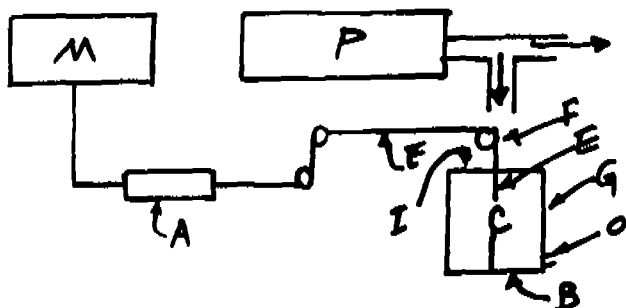
Applicant & Inventor : RAMAR CHETTIAR SENNIYAN
CHETTIAR PONNUSWAMY CHETTIAR AYYATHURAI,
SILLAMARATHUPATTI, MADURAI DISTRICT, TAMIL NADU,
INDIA, INDIAN NATIONAL.

Application No. 857/Maa/86 filed on 3rd November, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents
Rules, 1972) Patent Office, Madras.

7 Claims

A protective device for a prime mover coupled to a pump comprising a stationary container having at least one inlet and at least one outlet for the gravity flow of liquid from the pump therethrough, the container having a body with a base the whole or part of which is extensible and directly or indirectly suspended from an actuator connected to the prime mover controls, whereby whenever liquid is poured into the container, the weight of the liquid passing through the container, from the inlet to outlet, and acting on the base or part thereof, activates the actuator to start the prime mover and consequently the pump, such that the whole or a portion of the liquid discharging from the pump, diverted through the container, maintains the actuator in its activated state, the said actuator, however, being deactivated to shut off the prime mover and consequently, the pump, once the weight of the liquid passing through the container falls below a predetermined value.



Compl. Specn. 8 Pages.

Drg. 1 Sheet.

Ind. Cl.: 110—[GROUP -XXI(2)]
Int. Cl.⁴: D 04 B 9/00

168095

A NOVEL LOOP FORMING ELEMENT FOR KNITTING MACHINES USED FOR CONVERTING YARNS INTO FABRICS.

Applicant: THE SOUTH INDIA TEXTILE RESEARCH ASSOCIATION, COIMBATORE AERODROME P.O. COIMBATORE-641 014, TAMIL NADU, INDIA, A SOCIETY REGISTERED UNDER THE SOCIETIES REGISTRATION ACT, 1860.

Inventors: (1) TARAKAD VEDAMURTHY RATNAN, (2) SEN-NIMALAI GOUNDER RAMASWAMY, (3) PALANISWAMY MUTHUKUMARASWAMY.

Application and Provisional Specification No. 877/Maa/86 filed on 10th November, 1986.

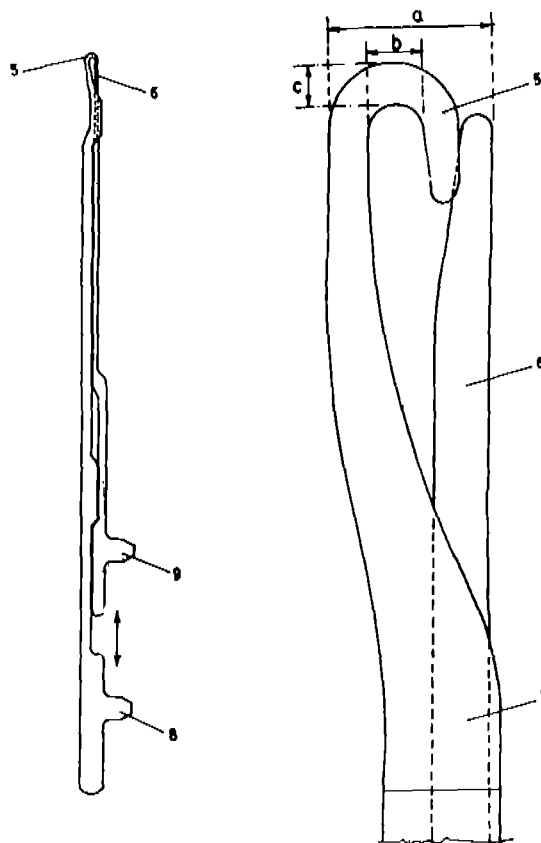
Complete Specification left January 19, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras.

3 Claims

A novel loop forming element for knitting machines used for converting yarns into fabrics comprising an assembly of two separate components namely the hook element (5) and the hook closing element (6) provided with butts (8, 9) the hook closing element (6) being guided through a groove (7) provided in the upper portion of the hook element (5), the assembly being placed in the needle trick of the knitting machine by engaging the respective butts (8, 9) in their respective

cam tracks, providing necessary translatory movement for loop forming.



Prov. Specn.—14 Pages;
Compl. Specn. 16 Pages.

Drgs. 3 Sheets.

Ind. Cl.: 85-Q & 127-F [GROUP-XXXI & LXV (1)]
Int. Cl.⁴: F 16 C 13/00

168096

ROTATABLE DRUM ASSEMBLY.

Applicant: F.L. SMIDTH & CO. A/S., OF 77, VIGERSLEV ALLE, DK-2500 VALBY, COPENHAGEN, DENMARK.

Inventor: HENNING ANDERSEN.

Application No. 941/Maa/86 filed on 3rd December, 1986.

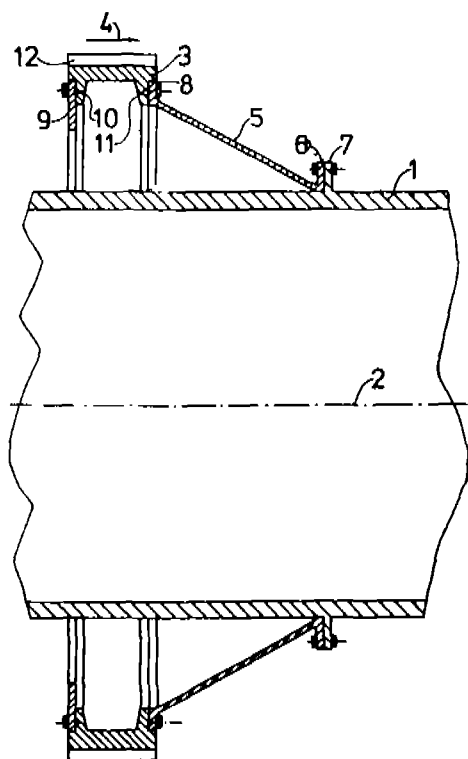
Convention date: January 27, 1986; (No. 8601928; Great Britain).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras.

3 Claims

A rotatable drum assembly comprising a rotatable drum (1) and a gear rim (3) mounted on the outside of the drum and radially spaced therefrom by means of a flexible connection (5); characterised in that gear rim (3) has bevel toothing (12); in that the flexible connection is a frustoconical casing (5), the narrower end of which has a diameter substantially corresponding to the outer diameter of the drum and is

secured to the outside of the drum, and the wider end of which has a diameter substantially corresponding to the diameter of the gear rim and is secured to the one side of the gear rim, the casing extending from its connection to the gear rim in a direction such that the casing receives a compressive loading due to the bevel toothing of the gear rim cooperating, in use with a complementary driving gear, and in that the gear rim is provided on its other side with a stiffening ring (9) having substantially the same radial stiffness as that of the casing, and being spaced from the drum.



Compl. Specn. 7 Pages.

Drsg. 1 Sheet.

Ind. Cl. : 107 C [GROUP XLVI (2)]
Int. Cl.⁴ : F 02 F 1/24

168097

A CYLINDER HEAD FOR A VALVE CONTROLLED INTERNAL COMBUSTION ENGINE.

Applicant : CUMMINS ENGINE COMPANY, INC. OF P O BOX 3005, COLUMBUS, INDIANA 47202-3005, UNITED STATES OF AMERICA, A COMPANY ORGANISED UNDER THE LAWS OF THE UNITED STATES OF AMERICA.

Inventor : PAUL CHARLES MCAVOY.

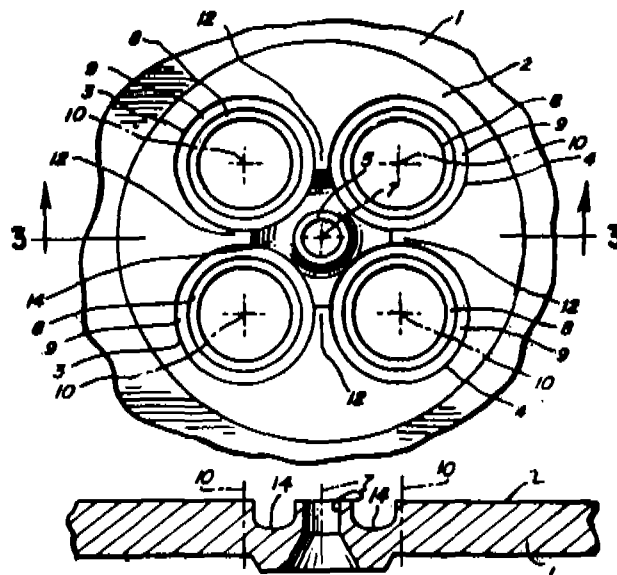
Application No. 943/Maa/86 filed on 4th December, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras.

12 Claims

A cylinder head for a valve-controlled internal combustion engine having a bottom surface which faces into an associated combustion

chamber and a plurality of spaced valve openings there through and also an injector bore for induction of fuel or ignition spark through the cylinder head, said bottom surface of said cylinder head having a circular cut-out portion radially spaced from said injector bore and extending toward said valve openings.



Compl. Specn. 12 Pages.

Drsg. 2 Sheets.

Ind. Cl. : 86-D—[GROUP-LXVI (4)]
Int. Cl.⁴ : A 47 H 23/14.

168098

CURTAIN FABRICS SUITABLE FOR USE IN GREEN-HOUSES OR SHADE HALLS.

Applicant : LUDVIG SVENSSON INTERNATIONAL B.V., OF MARCONIWEG 2, NL-3225-LV HELLEVOETSLUIS, NETHERLANDS, A COMPANY OF THE NETHERLANDS.

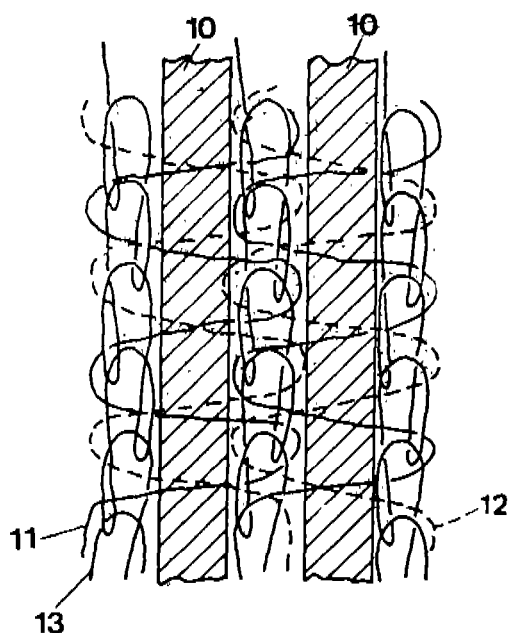
Inventor : GORAN HENNINGSSON.

Application No. 979/Maa/86 filed on 16th December, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras.

13 Claims

A curtain fabric suitable for use in green-houses or shade halls comprising spaced strips of a flexible sheet made of heat radiation reflecting and/or heat radiation absorbing material extending in a longitudinal direction of the fabric which are interconnected by means of textile threads capable of absorbing water by capillary action in a yarn framework having transverse connection threads (11, 12, 15, 16) and longitudinal connection threads (13, 14) the transverse connection threads being located on opposite sides of a plane containing the said strips extending across opposite surfaces of the strips respectively and the transverse threads on one side of said plane extending through the spaces between adjacent strips for connection to the longitudinal threads.



Compl. Specn. 20 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 48 A, 68 D [GROUPS LVIII (3), LVII(3)]
 Int. Cl.⁴ : H 05 F 3/02.

168099

A PASSIVE LIGHTNING ATTRACTING DEVICE.

Applicant & Inventor: JOHN RICHARD GUMLEY, AUSTRALIAN CITIZEN, OF 7 BUSCOMBE STREET, BELLERIVE TASMANIA, 7018, AUSTRALIA.

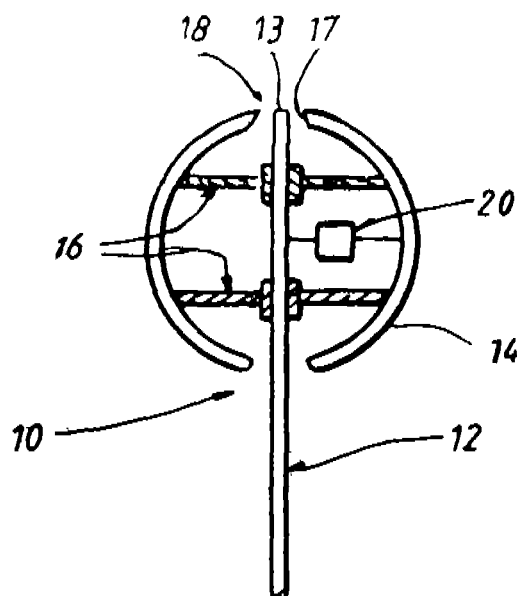
Application No. 989/Maa/86 filed on 18th December, 1986.

Convention dated 19th December, 1985 No. PH 3982 (Australia).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras.

9 Claims

A passive lightning attracting device, said device having at least one electrically conductive surface element insulated from an earth element, a high impedance drain connected between said or each surface element and said earth element, there being an air gap between said or each electrically conductive surface element and said earth element such that under particular atmospheric conditions, when the approach of a lightning down leader creates an electric field in the vicinity of the device, said device responds to said down leader, in that arcing takes place between said surface element or one of said surface element and said earth element, the arcing leading to plasma creation and upward leader formation.



Compl. Specn. 12 Pages.

Drgs. 5 Sheets.

Ind. Cl. : 33-C, D & F — [GROUP-XXXIII(3)]
 Int. Cl.⁴ : B 22 D 7/06.

168100

APPARATUS FOR REINSTATING OUTWORN INGOT MOULD SURFACES.

Applicant: BENTAVOLGYE MGTSZ, A BODY CORPORATE ORGANIZED UNDER THE LAWS OF HUNGARY, OF 29, FELSZABADULAS UTJA, 2030 ERD, HUNGARY.

Inventors: (1) JOZSEF VARADI, (2) ISTVAN SUBA, (3) GIZELLA VARADAI NEE RAGANY (4) DEZSO FODOR.

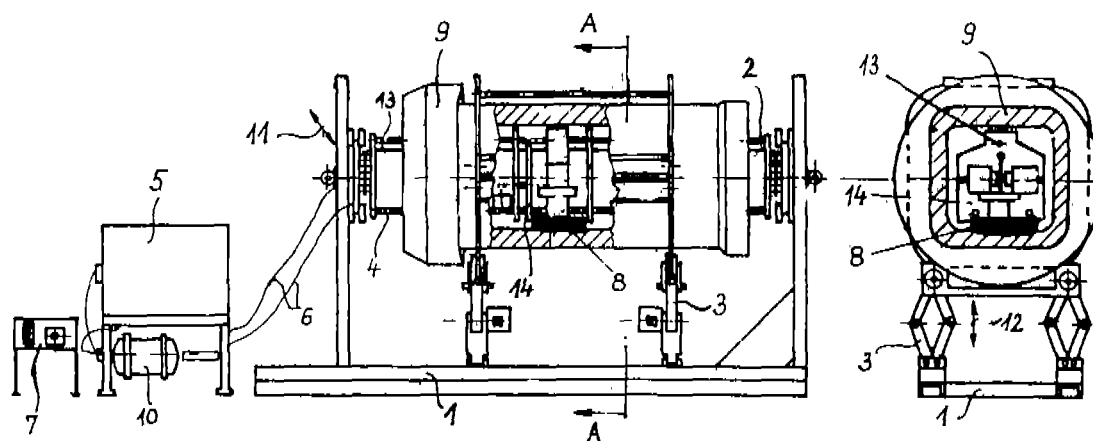
Application No. 1019/Maa/86 filed on 29th December, 1986.

Convention date : September 29, 1986; (No. 8623342; United Kingdom).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

5 Claims

Apparatus for restoring worn ingot mould surfaces, comprising a clamping device for holding the ingot mould to be treated, a tool holder on a slide guide connected to said clamping device, the said tool holder being capable of forward movement into said ingot mould, a rotary cutting tool held by the said tool holder, a rigid frame stand carrying said clamping device and said tool holder, a tool control unit controlling the movement of said tool holder, a turning and height adjusting device connected to a lower portion of said rigid frame stand and capable of manipulating and positioning the ingot mould during its machining, and a power unit for rotatably driving said rotary cutting tool.



Compl. Specn. 13 Pages.

Drg. 1 Sheet.

Ind. Cl. : 104 J, 104 C & 32 E
Int. Cl.⁴ : C 08 C 3/00

168101

PROCESS FOR EXTRACTING A RUBBER FRACTION OF HIGH MOLECULAR WEIGHT FROM GUAYULE RAW RUBBER.

Applicant : THE FIRESTON TIRE & RUBBER COMPNAY, A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF OHIO, UNITED STATES OF AMERICA, OF 1200 FIRESTONE PARKWAY, AKRON, STATE OF OHIO 44317, UNITED STATES OF AMERICA; MANUFACTURERS.

Inventors : ROBERT THOMAS BEINOR & WILLIAM MAX COLE.

Application No. 575/Del/86 filed on 1st July, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

5 Claims

A process for extracting rubber fraction of high molecular weight of the kind described herein from guayule raw rubber comprising the steps of:

forming a mixture of the guayule raw rubber with a solvent system, said solvent system having a ratio of 40% to 60% by weight of polar solvent to 60% to 40% by weight of hydrocarbon solvent at approximately 25°C effective to yield a separation of rubber, said organic polar solvent being selected from the group consisting of an alcohol having from 1 to 8 carbon atoms, an ester having from 3 to 8 carbon atoms, a ketone having from 3 to 8 carbon atoms, an ether having from 2 to 8 carbon atoms, and combinations thereof, said hydrocarbon solvent being selected from the group consisting of an alkane having from 4 to 9 carbon atoms, a cycloalkane having from 5 to 10 carbon atoms, an aromatic or an alkyl substituted aromatic having from 6 to 12 carbon atoms, and combinations thereof; and

removing in any known manner said solvent from said mixture to obtain said high molecular weight rubber fraction having a weight average molecular weight greater than that of said guayule raw rubber.

Compl. Specn. 14 Pages.

Drg. 1 Sheet.

Ind. Cl. : 140 A₂ KI (2).Int. Cl.⁴ : C 10 M 135/02, 135/06.

168102

A PROCESS FOR PREPARING A SULFURIZED COMPOSITION FOR USE AS LUBRICANT ADDITIVES.

Applicant : THE LUBRIZOL CORPORATION, A CORPORATION OF THE STATE OF OHIO, OF 29400 LAKELAND BOULEVARD, WICKLIFFE, OHIO 44092, UNITED STATES OF AMERICA.

Inventors : STEPHEN AUGUSTINE DIBIASE, ROGER LEE SOWERBY, WILLIAM LEE HIGGING. :

Application No. 607/Del/86 filed on 10th July, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

26 Claims

A process for preparing a sulfurized composition for use as lubricant additives which comprises reacting, at a temperature from 50 to 350°C, a sulfurizing agent as herein described with at least one member of the group consisting of a fatty acid ester of a polyhydric alcohol as herein described a fatty acid as herein described a fatty acid ester of a monohydric alcohol as herein described and an olefins as herein described in the presence of a catalytic amount of at least one member of the group consisting of a salt of at least one dithiocarbamic acid of the formula $R_1(R_2)N-CSSH$ wherein R_1 and R_2 are each independently hydrocarbyl groups, and a mercapto benzothiazole.

Compl. Specn. 80 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 70-B [LVIII (5)]

Int. Cl. : GOIN 27/30, HOIM 4/44.

168103

A METHOD OF MANUFACTURING A POLYMER CONSOLIDATED CADMIUM ELECTRODE FOR AN ALKALINE STORAGE CELL.

Applicant : SAFT., OF 156 AVENUE DE METZ 93230 ROMAINVILLE, FRANCE, A FRENCH CORPORATION.

Inventors : JEAN-LOUP BREZILLON & JEAN-MICHEL DAUCHIER.

Application No. 690/Del/86 filed on 29th July, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

4 Claims

A method of manufacturing a polymer-consolidated cadmium electrode for an alkaline storage cell, the method comprising the steps of:

Mixing the following ingredients in water: 3 to 3% by wt. of a gelling agent as herein described, 92 to 97% by Wt. of cadmium and cadmium oxide in powder form constituting the active material: a copolymer of carboxylated styrenebutadiene in the range 0.5% to 3% by weight of active material and 3 to 5% by weight of additives as herein described

coating the resulting paste on a metal current collector;

drying the coated current collector; and subjecting the dried coated current collector to a temperature in the range 120°C to 150°C for a period of one to five minutes in order to cause said polymer to cross-link.

Compl. Specn. 6 Pages.

Drp. NIL.

Ind. Cl.: 88-D [XXXII(3)], 139-D [IV(2)].
Int. Cl.: C01B 3/36.

168104

PROCESS FOR THE PRODUCTION OF A HYDROGEN PRODUCT GAS STREAM.

Applicant: IMPERIAL CHEMICAL INDUSTRIES PLC., A BRITISH COMPANY, OF IMPERIAL CHEMICAL HOUSE, MILLBANK, LONDON SW1P 3JF, ENGLAND.

Inventor: ALWYN PINTO.

Application for Patent No. 705/DEL/86 filed on 4th August, 1986.

Convention date August 7, 85/85 19821 (U.K.).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

10 Claims

A process for the production of a hydrogen product gas stream containing at least 50% by volume of hydrogen comprising:

- (a) subjecting a carbonaceous feedstock of the kind as herein described having a hydrogen to carbon atomic ratio, on an anhydrous basis, of less than 2.2 to partial oxidation with an oxygen/nitrogen mixture containing 15 to 35% oxygen and selected from air, oxygen depleted air, and oxygen enriched air, so as to produce a crude gas containing hydrogen, carbon oxides, and nitrogen;
- (b) subjecting the crude gas to catalyst shift reaction with steam by passing a mixture of said crude gas and steam over a catalyst for the shift reaction at elevated temperature to convert carbon monoxide to carbon dioxide;

The proportions of the reactants, and the process conditions, in the partial oxidation and shift stages being such that the resultant shifted gas stream has a nitrogen content at least 10 times the carbon monoxide content, by volume, and a volume ratio of hydrogen to nitrogen, plus carbon monoxide in the range 0.5 to 1.5;

(c) cooling the shifted gas stream to condense any excess of steam to produce a raw gas stream; and

(d) subjecting the raw gas stream to a pressure swing adsorption process to separate carbon oxides and nitrogen therefrom, said pressure swing adsorption process employing a plurality of beds of adsorbent for carbon oxides and nitrogen wherein each bed undergoes, successively a cycle including the steps of:

- (i) adsorption, wherein the raw gas stream is fed to the adsorbent bed at elevated pressure and carbon oxides and nitrogen are adsorbed from the raw gas onto the adsorbent;
- (ii) depressurisation, wherein the pressure of the gas in the bed is decreased thereby causing adsorbed gases to be desorbed from the adsorbent bed; and
- (iii) repressurisation wherein the pressure of the gas in said adsorbent bed is increased to said aforesaid elevated pressure in readiness for the next cycle; and

The cycle of the adsorbent beds being staggered such that at least one bed is on adsorption duty said pressure swing adsorption process being conducted such that, in the adsorption stage, adsorption is continued so that nitrogen break-through into the unadsorbed hydrogen containing product stream occurs, whereby the product gas stream contains at least 50% by volume of hydrogen and 0.5 to 40% by volume of nitrogen.

Compl. Specn. 25 Pages.

Drp. 1 Sheet.

Ind. Cl.: 9 D.
Int. Cl.: C 22 C 38/38.

168105

A PROCESS FOR THE PRODUCTION OF CREEP RESISTANT STAINLESS STEEL.

Applicant: COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, RAJ MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors: KANHAIYA PRASAD, RAGHUBIR SINGH, RAJENDRA KUMAR.

Application for Patent No. 796/Del/86 filed on 8th September, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

2 Claims

A process for the production of creep resistant stainless steel, having the compositions:

Chromium	—	18—20%
Manganese	—	12—14%
Carbon	—	0.4—0.5%
Nitrogen	—	0.4—0.5%
Molybdenum	—	0.4—0.5%
Tungsten	—	0.4—0.5%
Silicon	—	0.25% Max
Sulphur	—	0.03% Max
Phosphorus	—	0.03% Max
Iron	—	Remainder

which comprises melting scrap mild steel, and/or a straight chromium steel scarp, adding ferromolybdenum and ferro-tungsten and raising the temperature to 1900°C, adding ferro-silicon to the molten melt, so as to have C, N, W and Mo in the range of 0.4—0.5% of the product and that the C:N ratio is 1:1, skimming out any slag present, adding nitrided electrolytic manganese and/or nitrided chromium power so as to get recovery of nitrogen and pouring the resultant melt in suitable moulds.

Compl. Specn. 9 Pages.

Drgs. 3 Sheets.

Ind. Cl. : 24D1 (LV).

168106

Int. Cl. : B 60T-11/06, 11/12.

BRAKING ASSISTANCE VACUUM SERVOMOTOR

Applicant : BENDIX FRANCE, A FRENCH COMPANY, OF 126 RUE DE STALINGRAD 93700 DRANCY, FRANCE.

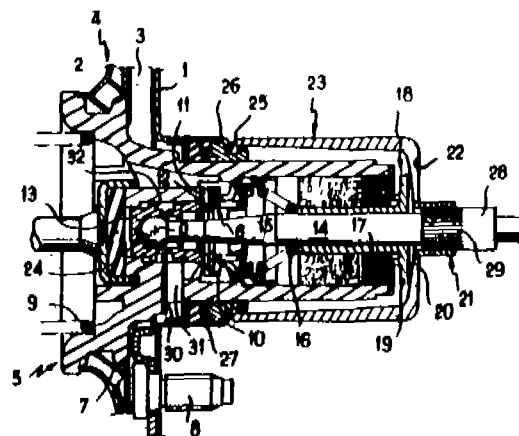
Inventor : JEAN-PIERRE GAUTIER

Application for Patent No. 861/Del/86 filed on 30th September, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

6 Claims

Braking assistance vacuum servomotor, comprising: a casing which comprises a rear portion (1,7) divided internally into a vacuum chamber (2) and a working chamber (3) by a piston structure (4) said piston structure (4) being biased by a piston spring (9) towards a rear portion of the casing, said piston structure (4) comprising a hub (5) enclosing a distribution valve means (6) consisting of a first valve seat (11), provided by the hub, a second valve seat (12) co-axial with said first valve seat (11) and provided by the end of a valve plunger (13) slidable in said hub (5) and connected to an actuating rod (14) of said servomotor, and a valve member (10) mounted in said hub biased axially by a valve spring (15) towards said first (11) and second (12) valve seats so as to cooperate with the latter, and a rod return spring (16) coaxial with said rod (14) and provided between said hub (14) and a tubular stop member (18) slidably mounted on said rod (14) said tubular stop member (18) comprising, remote from said rod return spring (16), first and second bearing surfaces (20) for cooperation with a first stop (21) on said rod (14), and a second reference stop (22), respectively, characterised in that said first stop consists of a ring member (21) mounted on said rod (14) and firmly fixed thereto in a predetermined position whereat said ring member (21) is in contact with said first bearing surface (20) of said tubular stop member (18) and said actuating rod (14) is positioned to bring said second valve seat (12) into contact with said valve member (10).



Compl. Specn. 11 Pages.

Drg. 1 Sheet.

Ind. Cl. : 107 F G —LVI(2)

168107

Int. Cl. : F01 B 3/00.

DIRECT FUEL INJECTION TWO-STROKE INTERNAL COMBUSTION ENGINE HAVING CONTROLLED IGNITION.

Applicant : PIAGGIO & C.S.P.A. A COMPANY ORGANISED UNDER LAW OF THE ITALIAN REPUBLIC OF VIAA. CECCHI, 6-16129 GENOVA, ITALY.

Inventor : MARCO NUTI.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

5 Claims

Direct fuel injection two-stroke internal combustion engine having controlled ignition incorporating at least one cylinder and its related piston, the combustion chamber of which is fed with fuel from a tank (14) by means of a pump (1) which delivers said fuel to said combustion chamber through a delivery duct (12) characterised in that the out let end of said delivery duct (12) is provided with a valve (20) having two out let ports (59, 18) and a valve head (26a), one port (59) leading to a pipeline (57) for fuel injection to said engine and the second (18) leading to a return or discharge duct (17) to said tank (14), said valve (26 a) being movable between a first position in which said first port (59) is open and said delivery duct (12) is in fluid communication with said injection pipeline (57) and a second position in which said fluid communication is interrupted and said second port (18) is open, an electromagnetic actuator (68) connected to said valve head (26a) for driving said valve head (26a) between said two positions, said actuator (68) being controlled by means of a control unit (65) connected between said actuator (68) and the engine which control unit (65) energises or de-energises said actuator (68) in accordance with the operational parameters of the engine, said actuator (68) in turn activating said valve (20) to maintain the valve head (26a) in said first position at least once during each revolution of the engine drive shaft coinciding with the delivery stroke of said pump (1).

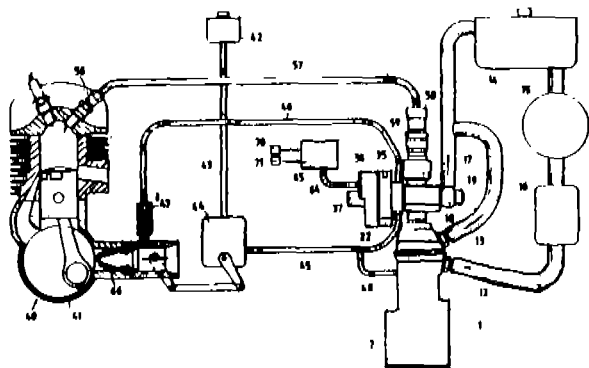


Fig. 1

Compl. Specn. 14 Pages.

Drg. 2 Sheets.

Ind. Cl.: 154 D XXXVII (1) & 203 XXXVII(3).
Int. Cl.: G07B 1/00.

168108

A MACHINE FOR PRINTING A SUCCESSION OF NUMBERS ON A TRAIN OF SHEETS OR DOCUMENTS.

Applicant: THE GOVERNOR AND COMPANY OF THE BANK OF ENGLAND, OF THREADNEEDLE STREET, LONDON EC 2R 8AH, ENGLAND.

Inventor: DAVID ROGINALD BUCKETT.

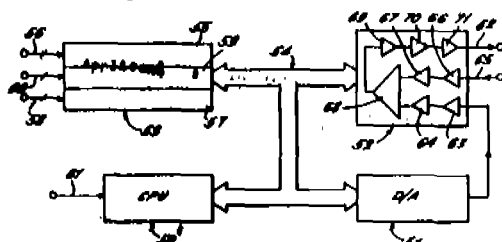
Application for Patent No. 1038/Del/86 filed on 28th November, 1986.

Convention date December 2, 1985/85/29688/U.K.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

4 Claims

A machine for printing a succession of numbers on a train of sheets or documents and having a transport mechanism for driving the sheets or documents in succession through a printing station, the machine comprising a printing cylinder (1) having spaced apart around its periphery a plurality of numbering barrels (2), and a drive mechanism (40-45) for rotating the printing cylinder at an operating speed corresponding to that of the sheets or documents, so that printing of a number is performed when a numbering barrel forms a nip with an impression cylinder (3) adjacent the printing cylinder, the machine being characterised by encoders coupled to the printing cylinder and the impression cylinder, and by a control arrangement which is coupled to the encoders and is also coupled to the drive mechanism so as to slow down the printing cylinder and allow the train of sheets or documents to overtake the printing cylinder by at least the distance between successive angular position in which a nip can be formed, and to restore the printing cylinder to the said operating speed before the next printing nip is formed.



Compl. Specn. 14 Pages.

Drgs. 3 Sheets.

Ind. Cl.: 85F.
Int. Cl.: B64D 37/02.

168109

FUEL COLLECTING CONTAINER FOR USE IN CONJUNCTION WITH A SURFACE TENSION FUEL TANK FOR A SPACE VEHICLE.

Applicant: ERNO RAUMFAHRTECHNIK GMBH. OF HUNEFELDSTRASSE 1-5, D-2800 BREMEN 1, WEST GERMANY.

Inventors: HELMUT BRUNS, ATUR FREIHEIT & ARNOLD KOLLEY.

Application for Patent No. 1078/Del/86 filed on 9th December, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

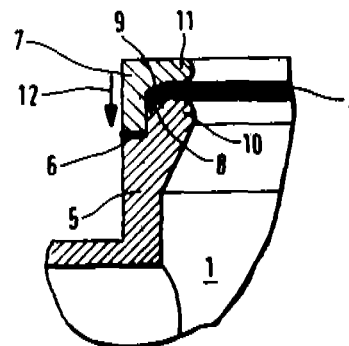
4 Claims

Fuel collecting container for use in conjunction with a surface tension fuel tank of a space vehicle; the container being made of titanium and comprising:

a flat cylindrical-tubular element (5) having an open end with a chamfered edge; (8)

a titanium clamping ring (7) mounted to said open end of said tubular container and having a corresponding chamfered (9) internal shoulder, said clamping ring being electron beam welded to said container in an area defining a gap between an axial end of the clamping ring (7) and an outer shoulder (6) portion of the container tube; and

a sleeve (4) covering the open end of the container and being clamped in between said chamfered shoulder (9) and said chamfered edge (8).



Compl. Specn. 9 Pages.

Drg. 1 Sheet.

Ind. Cl.: 36 B, XLIV (1).
Int. Cl.: F03G 1/06, 1/08.

168110

A DOWN RAD OR SHAFT FOR ELECTRIC CEILING FANS AND ELECTRIC CEILING FAN HAVING SAID STATOR SHAFT.

Applicant: THE JAY ENGINEERING WORKS LIMITED, AN INDIAN COMPANY HAVING ITS REGISTERED OFFICE AT 23, KASTURBA GANDHI MARG, NEW DELHI-110001, INDIA.

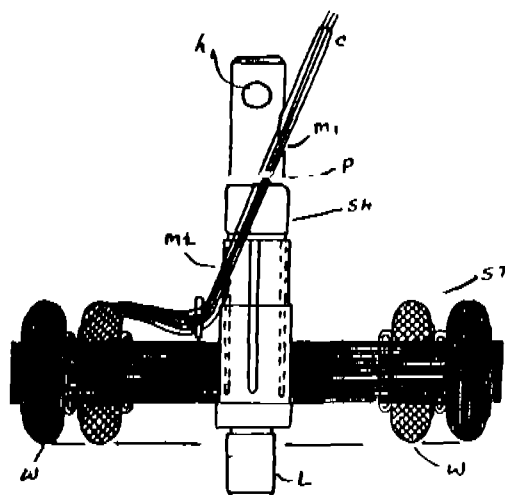
Inventors: TEJBHAN GUPTA, SATYA NARAIN MAHESHWARI, SHANKAR RAO, DEEPAK JAIN CHARANJIT GROVER & ANIL PANDE.

Application for the Patent No. 1116/Del/86 filed on 18th December, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

4 Claims

A stator shaft for electric ceiling fan characterized by an inclined guided passage passing through the longitudinal central axis of the shaft and extending from a location adjacent to its upper portion of the shaft from one side downwardly to the opposite side to a location adjacent to the part of the shaft, to which the stator core is being secured, the longitudinal axis of the shaft lying in a vertical plane and that of the said passage in a plane inclined thereto with respect to the said longitudinal axis.



Compl. Specn. 6 Pages.

Drw. 2 Sheets.

REGISTRATION OF ASSIGNMENTS, LICENCE ETC. (DESIGN)

Assignments, licences or other transaction affecting the interest of the original proprietors have been registered in the following case. The number of the case is followed by the names of the applicants for registration:

No. 146638 Wardex Pharmaceuticals Limited, a Company incorporated under the Companies Act, having its registered office at 55 Nelson Manicks Road, Aminjikarai, Madras-600029, Tamil Nadu, India.

REGISTRATION OF DESIGNS

The following design have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of The Designs Act, 1911.

The date shown in the each entries is the date of registration in the entry.

प्र० मा० सं० मु० फ०—जी० 437 जी० आ०/९०—३००.
MGIPF—G—437 GI/90—300.

Class 1. No. 162322. Star Hind Lathe Works, 2404-Kuncha Challan, Darya Ganj, Delhi-110006, India, a proprietary firm. "Locable Petrol Tap". July 16, 1990.

Class 3. No. 162152. Plastella, a partnership firm of 91, Swamivevekanad Road, Borivli (West), Bombay-400092, Maharashtra, India. "Comb". May 28, 1990.

" No. 162267. Walambia Industries, Gogate Wadi, Off. Aarey Road, Goregaon (E), Bombay-63, Maharashtra, India, "Flask". July 2, 1990.

" No. 162295. Eagle Flask Industries Limited, Indian Company of 141, Sheriff Devji Street, Bombay-400003, Regd. Office at "Eagle Estate", Talegaon 410507, Dist: Pune, Maharashtra, India. "Container". July 10, 1990.

" No. 162298. Eagle Flask Industries Limited, Indian Company of 141, Sheriff Devji Street, Bombay-400003, Regd. Office at "Eagle Estate", Talegaon 410507, Dist: Pune, Maharashtra, India. "Lunch Box". July 10, 1990.

Class 3. No. 162316. Eagle Flask Industries Limited, Indian Company of 141, Sheriff Devji Street, Bombay-400003, Regd. Office at "Eagle Estate", Talegaon 410507, Dist: Pune, Maharashtra, India. "Plate". July 12, 1990.

Class 5. No. 162269 to 162274. Sitapur Plywood Manufacturers Ltd., an Indian Company of P.O. Box No. 6, Sitapur-261001, U.P. India. "Decorative Fibrous Board". July 3, 1990.

Class 8. No. 162285. Eagle Flask Industries Ltd., Indian Company, 141, Sheriff Devji Street, Bombay-400003, Maharashtra, India/Eagle Estate, Talegaon 410507, Dist: Pune, Maharashtra, India. "Water Carrier". July 10, 1990.

Class 10. No. 162539. Mangal Rubber Products Pvt. Ltd., Swastik Industries Compound, Ram Baug, Chincholi Bunder Road, Malad (West), Bombay-400064, Maharashtra, India. "Footwear". October 10, 1990.

No. 162254, 162256 to 162259. Bata India Limited, 30, Shakespeare Sarani, Calcutta-700017, West Bengal, India. "Footwear". June 27, 1990.

Copyright extended for the 2nd period of five years.

No. 155326	Class 1
No. 156475, 156476 & 156094	Class 3
No. 156093	Class 4

Copyright extended for the 3rd period of five years.

No. 150133 to 150135	Class 4
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R. A. ACHARYA,
CONTROLLER GENERAL OF PATENTS,
DESIGNS AND TRADE MARKS.

